The Abstracts are only available online, free of charge, under
www.karger.com/doi/10.1159/000519887

2nd World Congress of Trichoscopy Hair & Nail and Anti-Aging 2021

Sorrento, Italy, October 9–11, 2021

Abstracts

President

Antonella Tosti, Miami, FL

Contents

Letter to ITS Members and hair friends

Sponsor Note (Logos)

Abstracts

Trichoscopy

Hair Disorders

Nail Disorders

Cosmetics

Author Index

Abstracts containing errors in spelling, grammar, or scientific content have been published as typed by the author and have not been corrected by the Publisher.

Conflicts of Interest Statement

Antonella Tosti declares that she has no conflicts of interest with without of authors of the abstracts selected.

International
Trichoscopy
Society

2ND WORLD CONGRESS OF TRICHOSCOPY

Hair&Nail and Anti-Aging 2021

www.worldcongresstrichoscopy2021.com

President:
Antonella Tosti

OCTOBER
9-11, 2021
SORRENTO (ITALY)
Hilton Sorrento Palace

Dear ITS Members and hair friends,

It is a great pleasure to have the proceedings of the 2nd World Congress of the Trichoscopy published on Skin Appendage Disorders.

As you all know we had to reschedule the Congress several times due the Covid -19 epidemic , but we were finally able to have an “in person” meeting that was very successful.

We had very interesting oral communications and poster from many countries, and I really have to thank you all of you for the participation and the interaction.

Antonella Tosti

President of the International Trichoscopy Society and of the 2nd World Congress of Trichoscopy

GOLD SPONSOR

EXHIBITORS

MEDICAL

CESARE **RAGAZZI**
— LABORATORIES —

DOAFARM

Fagron
personalizing
medicine

TRICOPAT

L'ORÉAL

Cosmétique Active

LA ROCHE-POSAY
LABORATOIRE D'OPHTHALMOLOGIE

VICHY
LABORATOIRES

CeraVe

SKINCEUTICALS
ADVANCED PROFESSIONAL SKINCARE

regenera activa

by **RIGENERA** hbw
REGENERA hbw

TRICHOSCOPY

TWINS IN TRICHOSCOPY

Kelati Awatef

Assistant professor in Dermatology

Department of Dermatology, University Hospital of Cheikh Khalifa, Casablanca, Morocco

**Corresponding author: awatkelati@gmail.com*

1. Background:

Trichoscopy is a very useful tool to diagnose hair disorders, and increase the diagnosis accuracy, it can also guide the biopsy site on the scalp in the most active area of the disease.

2. Aims and Objectives:

We suggest to perform an interactive session in which we will correlate the clinical and the trichoscopy findings of hair disorders presenting with the same clinical presentation in order to point out the utility of Trichoscopy in differentiating hair disorders that looks the same based on the clinical examination.

3. Methods:

In this session, a panoramic of clinical images (two or more in each time) of different diseases that look the same (same localization and clinical presentation) will be shown to the audience, and we will ask them to give their diagnosis for the two images (for example : two similar images of hair line recession, one patient present a frontal fibrosing alopecia and the other trichotilomania) . Then we will correct and show them the trichoscopic images of the patients, and we will point out the trichoscopic signs together with a brief review of the literature of every hair disorder.

4. Results: None

5. Conclusions:

This proposed interactive session will enable participants to test their knowledge in trichoscopy , and to be vigilant and eager to use trichoscopy even if the clinical presentation is typical of a hair disorder

CLINICAL ANALYSIS OF NON-CICATRICIAL FORMS OF ALOPECIA

Z.S. Jetpisbayeva¹, G.R. Batpenova¹, A.A. Aimoldina^{1*}

¹ NCJSC "Astana Medical University", Kazakhstan

*Corresponding author: aimoldina.a@mail.ru

Background: non-cicatricial alopecia, which includes androgenetic and diffuse forms, accompany patients throughout their lives and significantly affect the quality of life.

Objectives: clinical analysis of patients with non-cicatricial alopecia.

Methods: We examined 115 patients with non-cicatricial alopecia throughout the period 2013–2018. There were 94 patients with androgenetic alopecia (AHA), 21 women were with chronic diffuse telogen alopecia (CDTA), and 11 patients had a combination of AHA and CDTA.

Results: During trichoscopy, changes were detected in the parietal and occipital zones, although they were characterized by a predominance of changes in the AH-dependent zone. In the AH-dependent zone, the ratio of terminal and vellus-like hair in the parietal zone increased favoring vellus-like hair. The average number of single units in the parietal zone was greater than in the occipital one. Analysis of the redistribution and calculation of the average hair diameter showed pronounced anisotrichosis in the AH-dependent zone.

Minoxidil 5% 2 times a day for 6 months was used as topical therapy. With positive dynamics and patient consent, therapy was continued according to supportive regimens.

After 6 months positive dynamics was observed in all cases. Growth of denser, thicker hair was observed. The hair tension test was negative in all areas.

When conducting trichoscopy, an improvement was observed, more positive dynamics revealed in the occipital region.

Conclusion: Androgenetic alopecia has typical clinical features that develop against the background of a genetic predisposition with particular changes in androgenetic hormones that have tissue adherence in androgen-dependent areas of the scalp.

TRICHOTILLOMANIA MASKED BY DIFFUSE ALOPECIA AREATA: A CASE REPORT

V.C.S. Cua,^{1*} F.P.J. Lizarondo¹ and C.Y. Silva²,

¹ Resident Physician, Division of Dermatology, Department of Medicine, Philippine General Hospital, Philippines

² Clinical Associate Professor, Division of Dermatology, Department of Medicine, Philippine General Hospital, Philippines

*Corresponding author: vscua@up.edu.ph

1. Background:

Hair loss in pediatric patients comprises a range of congenital and acquired conditions that can either be cicatricial or non-cicatricial. Etiology may stem from disorders of the hair shaft or hair follicle to infectious and autoimmune. A thorough history provides information regarding acuity and pattern of hair loss, associated comorbidities and nutritional status. Physical examination may reveal signs of inflammation and the extent of hair-bearing regions involved while maneuvers such as the tug test and hair pull test provide a measure of hair fragility and disease activity, respectively. Trichoscopy allows for a non-invasive analysis of several follicular patterns as well as hair signs and shaft features that can help narrow down differentials among hair disorders that present similarly. Furthermore, it can be utilized to monitor disease activity and therapeutic response. The utility of trichoscopy is highlighted in this case where co-existence of alopecia areata and trichotillomania was uncovered after correlating clinical and histologic findings with the trichoscopic patterns.

2. Observation:

An 11-year old female previously treated for tinea capitis presented a 3-month history of continuous decrease in hair density on the vertex, frontal and parieto-temporal areas of the scalp. Hair pull test was negative. Thyroid function tests and hematologic work-up were unremarkable. Trichoscopic findings showed black dots, micro-exclamation point hairs, regrowing vellus hair and zigzag hairs. Histopathology showed CD3+ peribulbar lymphocytic infiltrates and occasional eosinophils around the anagen hair follicle consistent with a non-scarring alopecia. A diagnosis of diffuse alopecia areata was made. Patient was given methylprednisolone (0.5 mg/kg.day) for 2 weeks and noted marked increase in hair density except on focal areas of the scalp. Patient eventually admitted to occasional hair pulling. Trichoscopy revealed trichoptilosis on short hair strands, V-sign, tulip hairs and multiple broken hairs of varying length while a second biopsy on the focal alopecic area of the scalp showed trichomalacia and pigment casts consistent with trichotillomania. Patient was then referred to psychiatry for behavioral management. However, while tapering her methylprednisolone dose, she was lost to follow-up.

3. Key Message:

In cases like this where co-existence of alopecia areata and trichotillomania is considered to be uncommon, trichoscopy proves to be an important tool in differentiating hair disorders with similar presentation. Knowing key features of hair diseases can help elucidate the diagnosis when presented with an atypical case.

TO THE ISSUE OF TIMELY DIAGNOSIS OF CICATRICIAL ALOPECIA

Z.S. Jetpisbayeva¹, G.R. Batpenova¹, A.A. Aimoldina^{1*}

¹ NCJSC "Astana Medical University", Kazakhstan

*Corresponding author: aimoldina.a@mail.ru

Background: cicatricial alopecia can often be take place in the practice of a dermatologist and cosmetologist, in connection with which it is necessary to conduct a thorough examination of the entire skin surface, including the scalp; carefully study the anamnesis of the disease, the features of scalp care and protection from sun and other types of damage.

Observation: A 56-year-old patient received an appointment due to the prolonged absence of the effect of the therapy of dermatocosmetologist. Patient had complained about a pronounced thinning of hair that occurred more than five years ago.

Objectively: marked receding frontal hairline. Diffusely spreading foci are revealed on the parietal region. In some areas they well-marked and have curve shape, in some areas they gradually turn into healthy skin. The skin in the lesions is smooth, shiny, demonstrates waxy to yellowish-brown color with the absence of follicular pattern and follicular orifices. Signs of photodamage, post-inflammatory hypo- and hyperpigmentation, follicular hyperkeratosis, and horn plugs are noted.

Dermatoscopic picture - areas of healthy skin alternate with areas of post-inflammatory hypo-and hyperpigmentation, skin atrophy, single location of preserved hair follicles with perifollicular hyperkeratosis, disappearance of hair follicle holes.

Primary cicatricial frontal alopecia was diagnosed.

Key message: the case of late-diagnosed cicatricial alopecia in a woman in the postmenopausal period allows us to conclude that the diagnosis is complex and often late when significant fibrotic changes develop.

EVALUATION OF TRICHOSCOPIC PATTERNS IN ALOPECIA AREATA, TINEA CAPITIS AND TRICHOTILLOMANIA: A CASE SERIES STUDY IN SKIN OF COLOR

1st Balachandra S Ankad¹, 2nd Priyanka S Jaju²

¹Department of Dermatology, S Nijalingappa Medical College, Bagalkot-587103, India

² Department of Dermatology, Government Medical College, Nizamabad- 503002, India

* Corresponding author- Balachandra S Ankad, drbsankad@gmail.com

1. Background:

Trichoscopy, dermoscopy of scalp and hair, is a non-invasive diagnostic tool that allows the recognition of morphologic structures not visible by the naked eye. It is a novel diagnostic technique, both simple and non-invasive, can be used as a handy bedside tool for diagnosing common hair and scalp disorder. Alopecia areata (AA) is a common, chronic, inflammatory disease that causes non-scarring hair loss. The severity ranges from small patches of hair loss, which usually recover spontaneously, to complete alopecia where the prognosis for hair regrowth is poor. Tinea capitis (TC) is a common condition, of superficial fungal infection of the scalp, which is seen in children. The disease is primarily caused by dermatophytes, namely the *Trichophyton* and *Microsporum* genera that invade the hair shaft. Trichotillomania (TTM) is a chronic impulse control disorder characterized by repetitive hair pulling resulting in alopecia. The diagnosis of TTM is often difficult as other hair loss diseases appear similar in clinical manifestations. This difficulty is encountered especially with alopecia areata. As TTM often coexists with AA, the methodology enabling reliable detection of TT in AA needs to be developed.

2. Aims and Objectives:

- i. To evaluate the trichoscopic patterns of alopecia areata, tinea capitis and trichotillomania.
- ii. To evaluate adverse effects of the procedure.

3. Methods:

The study was conducted in Dermatology department at S.Nijalingappa medical college from January 2017 to January 2018. Informed consent was taken from the patients and ethical clearance was obtained from the institutional ethical committee. It was a hospital based case series study. Patients with patchy hair loss were included and were evaluated by trichoscopy using DermLite 3 dermoscope (10 x magnifications) with polarized and non-polarized light. Sony camera (Digital, 14 Mega pixels) was attached to save the images. Ultrasound gel was applied either on the skin lesion or on the foot plate and then lesions were observed through the eyepiece of dermoscopy. From the trichoscopic photographs obtained, hair shafts, hair follicle openings, perifollicular epidermis, cutaneous vasculature etc. were studied. Sample size calculation was done

using open Epi software version 2.3.1 at 95% confidence level and 8% absolute precision. Results have been presented as proportions and percentages.

4. Results:

A total of 150 patients with patchy hair loss were included in the study. Trichoscopically, patchy hair loss was featured by follicular and perifollicular findings. The most common features in alopecia areata were tapered hair 55(91.7%) ($p<0.05$) followed by micro exclamation mark hair 48(80%)($p<0.05$), black dots 41(68.3%)($p<0.05$) and yellow dots 35(58.3%)($p<0.05$) while the most specific finding was regrowing pig tail hairs($p<0.05$) and hypopigmented short vellus hairs ($p<0.05$) which were not seen in tinea capitis and trichotillomania.

The most common findings in tinea capitis were comma shaped hairs 30 (52.6%)($p<0.05$), zigzag shaped hairs 13 (22.8%)($p<0.05$) and corkscrew hairs 15 (26.3%)($p<0.05$) which are although not commonly seen, considered to be characteristic features and can be used to differentiate from alopecia areata and trichotillomania.

The most common diagnostic findings in trichotillomania were broken hairs in 29 (87.9%) ($p<0.05$), V-sign in 19 (57.6%) ($p<0.05$), and short hair with trichoptilosis in 11 (33.3%) ($p<0.05$), patients whereas the most diagnostic findings were flame hairs in 7 (21.2%) ($p<0.05$), hook hairs in 19 (57.6%) ($p<0.05$), hair powder in 3(9.1%)($p=0.010$) patients.

5. Conclusions:

In conclusion, our findings illustrate the value of a polarized-light handheld dermatoscope in the evaluation of trichoscopic findings in patchy hair loss. It provides insights into the pathogenesis and also helps to differentiate AA, TTM and TC providing an excellent first line method of assessment in clinics obviating the need for hair specimens or biopsy. A handheld dermoscope attached to a digital camera or a smart phone is a new tool of substantial help for diagnosis and management of patchy hair loss.

TRICHOSCOPY.NET: A NEW ONLINE PLATFORM FOR TRICHOSCOPY EDUCATION

A.Eisinger, DO¹ and K. Sukhdeo, MD PhD*¹

¹ Pilaris Dermatology, New York, NY USA

contact@pilaris.com

Background: Diagnosis of hair and scalp disease requires visualization of hair-bearing areas. Trichoscopy provides additional diagnostic information not available when a physician uses the naked eye. However, trichoscopy implementation remains poor - due in large part to limited education of providers on this subject.

Aims and Objectives: We constructed Trichoscopy.Net, a public website and mobile application educational platform to provide a) high quality visual content and text on the basics of trichoscopy, b) examples of normal hair/scalp from multiple ethnicities, and c) diagnosis of common and rare hair disorders.

Methods: Trichoscopic images were collected with patient consent from our specialty hair practice as well as user-submitted images. Images were annotated to facilitate identification of diagnostic features described in the accompanying text.

Results: Trichoscopy.Net is a novel online educational resource accessible online and features a mobile app. New images continue to be added to the platform.

Conclusions: When trichoscopy is not utilized, patients with scalp and hair disorders are more likely to receive inappropriate care due to misdiagnosis. Lack of accessible teaching resources led us to develop Trichoscopy.Net. It fills a much-needed void in healthcare: a free comprehensive resource for practitioners across various specialties and levels of training.

TRICHOSCOPY OF CICATRICIAL ALOPECIA: WHAT IS NEW IN THE SKIN OF COLOR?

1st Balachandra S Ankad¹, 2nd Balkrishna P Nikam²

¹Department of Dermatology, S Nijalingappa Medical College, Bagalkot-587103, India

² Department of Dermatology, Krishna Institute of Medical Sciences, Karad-415110, India

* Corresponding author- Balachandra S Ankad, drbsankad@gmail.com

1. Background: (11-point boldface)

Trichoscopy, the dermoscopy of hair and scalp, has gained an important diagnostic tool due to its non-invasive nature. In cicatricial alopecia, hair follicle is the primary target for the pathogenesis and destruction. Trichoscopy demonstrates different trichoscopic patterns in various primary cicatricial alopecias. Since clinical and histopathological features are overlapping in cicatricial alopecia, the diagnosis is very challenging. Trichoscopy assist to distinguish among different cicatricial alopecia. Here we document the trichoscopic patterns in cicatricial alopecia in skin of color.

2. Aims and Objectives:

To evaluate the trichoscopic patterns in cicatricial alopecia in skin of color

3. Methods:

This study was conducted between January 2019 and July 2019 in a tertiary hospital attached to S. Nijalingappa Medical College in South India. Ethical clearance from the institute and informed consent from the patients was obtained. Patients presenting with cicatricial alopecia were selected. Demographic data in respect with age, sex, occupation and skin type was noted. Dermoscopic examination was done with DermLite DL 4 with 10x magnification. Skin biopsy was done to confirm the diagnosis. Results have been presented as proportions and percentages.

4. Results:

A total of 72 patients with 42 males and 30 females were included in the study. Age ranged from 14 years to 50 years. Discoid lupus erythematosus (DLE) was most common and seen in 35 (48.6%) patients with lichen planopilaris in 20 (27.7%) patients. Frontal fibrosing alopecia (FFA), folliculitis decalvans (FD) and pseudopelade of Brocq were observed in 10 (13.8%), 5 (6.9%), and 10 (13.8%) of patients respectively. Central centrifugal cicatricial alopecia (CCCA) was seen in 2 (2.7%) patients. Follicular plugs (white and yellow color), yellow dots, black dots, absent follicular openings, follicular red dots, arborizing vessels and blue gray globules were noted in 15 (42.8%), 5 (14.2%), 2 (5.7%), 20 (57.1%), 15 (42.8%), 10 (28.5%) and 20 (57.1%) of DLE patients respectively. Peripilar cast, perifollicular scaling, white dots, blue gray globules were seen in 8 (40%), 10 (50%), 8 (40%) and 12 (60%) of LPP patients respectively. Honey comb pigment pattern and absent follicular openings was seen all the patients 10 (100%) of pseudopelade of Brocq. Perifollicular pustules, fibrosis and tufting of hairs are seen in all 5 (100%) the cases of FD. Perifollicular blue-gray halo was specifically seen in CCCA. FFA showed lone hairs, erythema, and perifollicular scaling in all the cases (100%). Interestingly, distinctive patterns were noted because of skin of color. Perifollicular erythema in LPP was not noted in this study. Thick arborizing vessels in DLE were not prominent.

5. Conclusions:

Trichoscopy plays an important role in the diagnosis of cicatricial alopecia by demonstrating characteristic and specific patterns in follicles and perifollicular structures. We observed few distinctive patterns because of skin of color. Thus trichoscopic patterns differ in skin prototypes. This knowledge is critical in reading the trichoscopic patterns

PRESSURE-INDUCED ALOPECIA: PRESENCE OF THIN HAIRS AS A TRICHOSCOPIC CLUE FOR THE DIAGNOSIS

Daniel Fernandes Melo a, b, Violeta Duarte Tortelly a, b, Beatriz Serafim Ghedin a, Caren dos Santos Lima c, Thais Ura Garcia a, Taynara de Mattos Barreto a

a Department of Dermatology, Marcílio Dias Hospital, Rio de Janeiro, Brazil;

b Department of Dermatology, Pedro Ernesto University Hospital, State University of Rio de Janeiro, Rio de Janeiro, Brazil;

c Department of Dermatology, State University of Pará, Belém, Brazil

*Corresponding author: E-mail adress

Daniel Fernandes Melo danielfernandesmelo@yahoo.com.br

1. Background:

Pressure-induced alopecia (PA) is a term used to describe a group of scarring and nonscarring alopecias that usually occur following prolonged immobilization.

Trichoscopic findings described in the literature are scarce, nonspecific, and include black dots, broken. hairs, circle hairs, erythema, and ulcerations.

Hair loss happens because of tissue ischemia caused by prolonged pressure on the scalp, which results in compression of the vessels surrounding hair follicles with the cessation of their activity.

2. Observation:

We report 3 cases of PA in which vellus hairs and residual thin hairs were preserved. Since vellus and thin hair bulbs are located more superficially than the terminal ones, they will experience less injury and hypoxia, leading to preservation of those hair shafts.

A possible reason would be that the pressure distribution occurs in a conical shape, similar to what happens in pressure ulcers, so it exposes deeper tissues to a higher pressure, leading these areas to suffer more from ischemia.

We suggest that the presence of thin and vellus hairs should be considered as a trichoscopic clue for PA diagnosis in doubtful cases.

3. Key Message:

We reported 3 cases of PA in which clinical and trichoscopic features led to a correct diagnosis. Many vellus hairs and residual thin hairs were observed in all cases, and their presence may be explained by their lower metabolic rates and/or the more superficial insertion of their bulbs. These trichoscopic features have not yet been reported in the literature. Although more studies with a larger number of patients are necessary to confirm our observations, we suggest that they should be considered as trichoscopic clues for PA diagnosis in doubtful cases.

DERMOSCOPY REVEALING A CASE OF DERMATOPHYTOSIS OF THE EYEBROW

A. Souissi*, S. Harbaoui, N. Toukabri, M. Mokni

Dermatology department. Rabta hospital. Tunisia

*Corresponding author: dr.asmahanesouissi@gmail.com

1. Background: Tinea capitis (TC) is a superficial fungal infection of the scalp which diagnosis relies on mycological examination. Dermoscopy is a technique that has been suggested to facilitate the diagnosis of TC. Some dermoscopic features have been associated with the diagnosis of TC including comma hair (CH), corkscrew hair (CSH) and zigzag hair (ZH).

2. Observation: A 7-year-old girl presented with a one-month history of an asymptomatic patch on her face. Clinical examination revealed a well-demarcated, desquamative, erythematous patch on her forehead which extended to her left eyebrow. The rest of physical examination was normal. Dermoscopy revealed the presence of CH, CSH, ZZH, black dots and scales. Direct examination showed an ectothrix invasion and the fungal culture showed the presence of *Microsporum canis*. The patient was treated with griseofulvin 20mg/Kg/day for six weeks with complete resolution. All dermoscopic features also disappeared after the treatment.

3. Key Message: In TC, many dermoscopic aspects have been described including BCH, CH and ZH. CH and CSH are the most frequently observed hair shaft abnormalities. CH represent broken hairs resulting from cracking and bending of a hair shaft filled with hyphae while CSH seems to be a variation of CH, manifesting mostly in black patients. Our observation is original by the atypical localization of TC. It also emphasizes the importance of dermoscopy in the diagnosis of TC and follow up in the daily routine of dermatologists.

TITLE: "CLUSTER OF STAR APPEARANCE" A NEW TRICHOSCOPY MARKER FOR DIAGNOSIS OF ATRICHIA CONGENITA WITH PAPULAR LESION.

1st A. Deep Jarsania^{1*}, 2nd B. Rachita Dhurat¹, 3rd C.Aseem Sharma¹, 4th D. Radha Mundhra¹

¹ Department of Dermatology, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, Maharashtra, India.

*Corresponding author: deepjarsania@gmail.com

Category: Trichoscopy

1. Background:

Atrichia congenita with papular lesions (APL) represents a complex and heterogeneous group of genodermatoses with unclear etiopathogenesis. It is characterized by hair loss soon after birth and is associated with development of keratin filled cysts over the body. Ahmed et al was the first who referred to this condition as congenital atrichia. Homozygous mutations in the hairless gene (HR) have been implicated. We herein report a child with congenital atrichia with papular lesion, which is very rarely reported in the literature and its characteristic dermoscopic findings.

2. Observation:

A 5 year old female child was brought to the outpatient department for decreased hair growth over the scalp, eyebrows, and eyelashes since birth with no significant family history. On clinical examination, 10-15 sparse discrete, lusterless hairs with rough texture were present over scalp. She also had complete absence of hair over eyebrows, eyelashes since birth. On closer cutaneous examination tiny monomorphic keratinous papules were seen over the scalp. Dermoscopy of the scalp revealed cluster of white dots distributed across the entire scalp.

On trichoscopy, we noted a characterised pattern of cluster of white dots on the scalp, which has been described as a "cluster of stars" appearance. On the basis of dermoscopy and clinical findings congenital atrichia with papular lesion was diagnosed.

3. Key Message:

This case highlights the trichoscopy findings that appears to be a characteristic finding for the disease. Thus we present this case as it is rare and giving a characteristic clinical and new trichoscopy finding in the era. Dermoscopy forms a noninvasive diagnostic tool and it may obviate the need of scalp biopsy especially in pediatric age group.

A CLINICAL CASE OF COMEDO NAEVUS OF THE SCALP IN A 6-YEARS OLD MALE CHILD

M. Babushkina

Department of Dermatovenerology, Izhevsk State Medical Academy, Russia

babushm@yandex.ru

Background. Comedo naevus (nevus comedonicus, NC) is a type of an epidermal nevus, a pilosebaceous hamartoma. It is characterized by linear lesions comprising dilated follicular openings with keratinous plugs resembling classical comedones. They may be present at birth or appear later. (Ripudaman Arora et al., 2016).

Observation. A 6-year-old boy presented with asymptomatic comedo-like lesion on the occipital region of the scalp since birth. There was no history of irritation or a familial history of similar lesions. Cutaneous examination revealed groups of dilated follicular openings filled with yellowish and light brown, hard plugs distributed on the occipital region in 4 cm × 2 cm area. Comedo extraction is not easily achieved. Single terminal hair was visualized in the lesion. General physical and systemic examination, routine laboratory investigations were normal. Trichoscopy (nonpolarized × 60, × 200) showing multiple ostia containing yellowish keratinous material and well-defined, structure-less, light brown homogenous circular areas around it.

Key Message. Diagnosis of NC is based on clinical examination and trichoscopy. Dermatologists should be aware of potential association of NC with skin tumors and extracutaneous manifestations (NC syndrome). Surgery and laser treatment may be used for cosmetic purposes.

CIRCLE HAIRS ON SCALP DERMOSCOPY IN ANDROGENETIC ALOPECIA AS AN INDICATOR OF AUTOIMMUNITY

Arshdeep,^{1*} Batrani M,² Kubba R¹

¹ Department of Dermatology, Delhi Dermatology Group, India

² Department of Pathology, Delhi Dermatology Group, India

*Corresponding author: arsh_deep2003@yahoo.com

Background: Circle hairs or pigtail hairs on scalp dermoscopy are characteristically observed in a cluster in a patch of alopecia areata (AA). Presence of scattered discrete circle hairs have been reported in androgenetic alopecia (AGA); but no significance has yet been associated.

Aims and Objectives: The aim of this study is to determine association of circle hairs in AGA with biochemical markers of autoimmunity.

Methods: 30 AGA patients aged between 25-50 years, with and without trichoscopic presence of circle hairs were included as cases and controls respectively. Biochemical markers of autoimmunity including antinuclear antibody (ANA), anti-thyroid peroxidase (TPO) and anti-thyroglobulin antibody (TGA) were performed in all patients. Histopathological correlation was done in 6 consenting cases.

Results: Trichoscopy revealed discrete presence of circle hairs in more than 3 out of 10 pre-determined fields examined in 30 cases, in addition to hair diameter diversity, numerous vellus hairs, yellow dots and peripilar sign seen in all cases and age/sex-matched controls. Personal and/ or family history of hypothyroidism, AA or vitiligo was noted in 11 cases and 6 controls. TPO and/ or TGA were significantly higher in cases (56.7%) than in controls (13.3%) with p value <0.01. ANA was positive in 6 cases and 1 control. Histopathological correlation of circle hairs showed lymphocytic microfolliculitis at the level of isthmus and/or bulb of occasional vellus hair.

Conclusions: Trichoscopic finding of circle hairs in AGA seems to correlate with biochemical markers of autoimmunity. Such cases could point towards presence of immunologically driven trigger in AGA. Cases with a positive autoimmune profile responded well to topical steroids given in addition to AGA specific treatment. Further studies need to be done to elucidate this hypothesis.

TRICHOTILLOMANIA: THE IMPORTANCE OF DERMOSCOPIC FEATURES

Natália Andressa Buss Venier^{1*}, Isadora da Luz², Ana Cristina Schmidt Dorneles³, Leandro Damiani⁴, Renan Minotto⁵,

^{1 2 3 4 5 6}Hospital Santa Casa de Misericórdia de Porto Alegre, Brasil

*Corresponding author: Venier NAB. E-mail: nataliabuss@hotmail.com

1. Background

Tricoscopy is a noninvasive exam and has specific findings of trichotillomania and assist in the differentiation of alopecia. We report a digital dermatoscopy of a case of trichotillomania where the patient presented scalp rarefaction and no characteristic plaque of the lesion.

2. Observation

Digital dermatoscopy performed on a 56-year-old female patient complaining of hair loss. Macroscopy presence of mild midline rarefaction. In the dermatoscopy of the vertex presence of broken wires, hook wires, black and yellow dots and bizarre wires. Suggestive diagnosis of trichotillomania.

Examination of the scalp of patients with trichotillomania generally reveals asymmetrical alopecia plaque, mainly in the frontal region and vertex. Hair with different lengths and short vellus. The tensile test is negative in periphery of them. Other disorders is observed like compulsive disorders such as onychophagy and onicotylomania

Trichoscopy shows decreased hair density, short vellus hair, broken hairs with different shaft lengths, coiled hairs, short vellus hair, trichoptilosis, sparse yellow dots, which may or may not contain black dots and no exclamation mark hairs.

3. Key Message

Noninvasive methods, such as dermatoscopy, since histopathological study may be inconclusive is essential because alopecia have different prognoses and treatments.

OVERSIZED BLACK DOTS: A UNIQUE TRICHOSCOPIC FINDING SUPPORTING THE DIAGNOSIS OF TRICHOTILLOMANIA BUT NOT OF ALOPECIA AREATA

M. Kinoshita-Ise,^{1*} S. Hatano,¹ M. Fukuyama,¹ and M. Ohyama¹

¹Department of Dermatology, Kyorin University School of Medicine, JAPAN

*Corresponding author:

misakiku1005@yahoo.co.jp

+81-422-47-5511

Background: Trichotillomania (TTM) clinically mimics alopecia areata (AA) and differential diagnosis can be challenging. Relatively-specific signs of TTM, including follicular microhemorrhage (FMH) and V-sign, have been reported and used in daily practice; however, they are not frequently observed. Therefore, more specific and easily-detectable signs of TTM are still needed.

Aims and Objectives: We have noticed TTM often demonstrates unique black dots characterized by wider and more irregular endings than typical black dots. We named this sign “oversized black dots (OBD)” and evaluated its diagnostic significance in TTM.

Methods: Trichoscopic images of 25 TTM cases and 25 AA controls were analyzed. First, the frequency of OBD was assessed in TTM and AA respectively. Then black dots/hair shaft (BD/HS) Index, defined as the value of area of black dots/putative cross-sectional area of hair shafts was calculated utilizing Image J software.

Results: OBD was detected in 13 out of 25 TTM but undetectable in any AA cases. The frequency of OBD was remarkably higher than those of other TTM signs, such as FMH and V-sign. BD/HS index was significantly higher in TTM than in AA.

Conclusions: Our results suggest that combination of OBD with other TTM signs might enhance the diagnostic accuracy of TTM. The mechanism of OBD remains elusive; however, we speculate that destruction of hair shafts by mechanical pulling and subsequent breakage of elastic fiber might contribute to OBD formation.

INTERESTING SIGNS IN TRICHOSCOPY- "THE NEW KIDS IN THE BLOCK"

1st Sraddha Naidu Kona^{1*}, 2nd Rachita Dhurat¹, 3rd Aseem Sharma¹, 4th Sandip Agrawal¹

¹ Department of Dermatology, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, Maharashtra, India.

*Corresponding author: sradda075@gmail.com

Category: Trichoscopy

1. Background:

The world of trichology keeps unfolding with new secrets with every new invention. With the aid of a simple tool like trichoscopy we have put together a few new signs which help us broaden our horizons.

2. Observation:

a. The 'halo' and 'wipeout' signs to differentiate black dots from hair dust on trichoscopy"- These are 2 simple novale signs which differentiates black dots from hair dust on simple epiluminescence microscopy. Due to the presence of the hair shaft below the black dots, they appear to have a grayish halo around (Halo sign) unlike the hair dust which can be wiped out with a cotton bud or Q- tip.(Wipeout sign)

b. Broom Hair sign on trichoscopy and Hamburger sign and Gear Wheel appearance on histopathology seen in a case of lichen simplex chronicus of the scalp where multiple hairs arise from a single follicular opening.

c. Flame sign seen in Trichotillomania –

Flame hair is a type of proximal hair residue, which remains attached to the scalp after pulling anagen hair.

d. Pigtail hairs seen in Telogen effluvium-

Telogen effluvium is one of the most common type of nonscarring hair loss. Although trichoscopic features of TE are not characteristic but upright short regrowing hair have been described most commonly. Some of these hair may take the shape of Pigtail hair.

e. Chrysalis sign in Angiolymphoid Hyperplasia with Eosinophilia (ALHE) of the scalp-

A 35 yr old female, came with a complaint of multiple asymptomatic lesion over scalp since 2 years. On trichoscopy, small areas of white criss cross pattern was seen similar to hard outer case of a chrysalis- Chrysalis sign

3. Key Message:

This report brings into light the use of trichoscopy as a quick non-invasive diagnostic aid that can help delineate specific signs in trichology from the common differentials

TRICHOSCOPY OF PEMPHIGUS VULGARIS IN REMISSION. A TOOL FOR TREATMENT-CESSATION DECISION MAKING?. PRELIMINARY RESULTS

G. Kontochristopoulos¹, Th. Spiliopoulos² and G.C.Chaidemenos^{3*}

¹ Dept of Dermatology, "A. Sungros" Hospital, Athens, Greece

² Dept of Dermatology, General University Hospital of Patras, Greece

³ Private Office, Dermatology-Venereology, Thessaloniki, Greece

* Corresponding Author: G. Chaidemenos. E mail : cgiorgos@otenet.gr

Background:

One of the controversies in the treatment of Pemphigus Vulgaris (PV), is the time of treatment cessation. Scalp involvement is often the most stubborn to treatment body site and may reflect disease activity. Trichoscopy (Dermoscopy of scalp) features have not been studied in clinically "healthy-looking" skin of patients in full remission.

Aims and Objectives:

To find out if there are any trichoscopy features in PV patients in clinical and immunologic remission, and accommodate treatment decision

Methods:

The age and disease duration of the 3 women with PV were correspondingly 62, 63, 55 and 5, 6, 15 years. Treatment at examination was 2,5 mg prednisone(Pr), for the last 22, 5 and 7 months. The 2nd patient also required 1 mg/kg/d Azathioprine. Anti Desmoglein antibodies turned to negative since Oct/2017, Feb/2017, Sept/2015. Contact dermoscopy and hand lens X10 magnifier for clinical evaluation, were used.

Results:

A red hue background, peripillar scales and tubular casts were observed by trichoscopy in the first 2 patients. Only peripilar scales on a small brown roundish area were the features in the 3rd patient. Treatment cessation was decided only in this patient, since casts are considered as a consequence of outer root sheath acantholysis and a sign of disease activity

Conclusions:

Areas of red hue skin background and movable cylindrical scales (casts) around hair shafts may be observed, even in the absence of apparent scalp clinical involvement, in PV patients in remission. Since these features may drive physicians to treatment continuation, Dermoscopy of the scalp is required in clinically "healthy-looking" PV patients, before a decision of treatment cessation is made. Future studies with greater number of patients, furtherly validated by long term disease course outcome, are needed

THE ROLE OF ULTRAVIOLET-ENHANCED TRICHOSCOPY ON THE EARLY DIAGNOSIS OF TINEA CAPITIS

Isadora da Luz Silva¹, Aline Alves Domingues¹, Ana Cristina Schmidt Dorneles¹, Natália Andressa Buss Venier¹, Leonardo Albarello¹, Leandro Damiani^{1*}

¹Dermatology Department of Hospital Santa Casa de Misericórdia de Porto Alegre, Brasil

*Corresponding author: L. Damiani. E-mail: damiani_leandro@hotmail.com

1. Background:

A 67-year-old woman with a one-year history of multiple plaques covering her scalp, based on erythematous and meliceric crusts was referred to our Department of Dermatology to evaluation. Trichoscopy showed comma, corkscrew, zigzag and broken hairs, as well as black dots and white sheaths. We performed ultraviolet-enhanced trichoscopy, which showed a characteristic fluorescence of yellow-green color, suggesting *Microsporum* colonization. The scalp biopsy and direct mycological examination confirmed the diagnosis of *Tinea capitis*.

2. Observation:

Tinea capitis is a common scalp infection in children and could happen rarely in adults. It's caused by a range of dermatophyte species. The diagnosis include characteristic dermoscopy, direct mycological examination, culture and, sometimes, scalp biopsy. However, we can also perform ultraviolet-enhanced trichoscopy to earlier diagnosis and subsequent initiation of treatment. UV-enhanced trichoscopy is a method that combines trichoscopy with the effect of a Wood's lamp examination. The Wood's light induces different types of fluorescence by the infectious agent or its metabolites. When colonizing the hair with *Microsporum canis* and another species of *Microsporum* we can observe a bright yellow-green to whitish-green fluorescence.

3. Key Message:

The ultraviolet-enhanced trichoscopy is a non-invasive and easy to use instrument. This feature anticipates and enhances the diagnostic potential of trichoscopy in *Tinea capitis*.

CLINICAL AND TRICHOSCOPIC EVALUATION OF ISOTRETINOIN EFFICACY IN LICHEN PLANOPILARIS

M. Kurzeja,^{1*} M. Olszewska¹, L. Rudnicka¹

¹Warsaw Medical University, Poland

*Corresponding author: mkurzejaderm@gmail.com

Background: Lichen planopilaris is the most frequent cause of primary lymphocytic scarring alopecia. Several treatment strategies have been proposed in classic lichen planopilaris (LPP), although there is no gold standard of therapeutic approach.

Aims and objectives: The aim of our study was evaluation of isotretinoin efficacy in lichen planopilaris on a basis of clinical picture and trichoscopy examination.

Methods: A retrospective review of medical records of twenty four patients with histological diagnosis of lichen planopilaris were made. Trichoscopy was performed after 4 and 12 weeks of treatment and then every 3 months for a year.

Results: All patients were treated with isotretinoin at a dose of 20 mg per day. Initially trichoscopic examination of all patients showed perifollicular scaling, perifollicular erythema and elongated parallel oriented blood vessels close to the hair follicle. After 12 weeks of treatment the trichoscopic feature of active LPP were absent in 79.2% (19/24) of patients, although some clinical signs of LPP were still present.

Conclusion: This retrospective study demonstrate the beneficial effects of isotretinoin in lichen planopilaris. Trichoscopy is an effective method for assessing the effectiveness of treatment of lichen planopilaris.

HOW IMPORTANT IS TRICHOSCOPY IN DIAGNOSTICS OF LOOSE ANAGEN SYNDROME?

E.Dubrovskaya¹, V.Bilonoh¹, K.Khobzei¹

¹Euroderm medical centre, Ukraine

*Corresponding author: elinadubrovskaya1801@gmail.com

Background:

Loose anagen syndrome (LAS) is a rare form of hair loss which is usually diagnosed within young girls with blond hair and complaints regarding the lack of hair growth. In some cases clinical picture of LAS may be atypical.

Observation:

Three cases were included in the study. All patients were 4 to 6 y.o. girls. Two patients (67%) had a typical clinical presentation: blond, thin and sparse hair, inability to grow long hair, and highly positive pull test. One patient (33%) had atypical clinical picture presentation: darker blond long hair, no complaints on excessive hair shedding and slightly positive pull test.

On trichoscopy at 20x magnification major predominance of single hair follicular units was observed in all patients (100%). Rectangular black granular structures and solitary yellow dots were found in 33%. At 70x magnification typical for LAS changes of hair roots were noticed in 100% cases: a hairy cuticle resembling a crumpled sock, hair bulb was at an acute angle to the shaft resembling a «mouse tail».

Key Message:

Trichoscopy is non-invasive method which is of great value in the diagnosing of LAS especially within patients with atypical clinical presentation. Thus, high magnification trichoscopy of hair roots is recommended for routine examination of patients complaining for hair loss in order not to overlook LAS.

TRICHOSCOPY OF SCALP WHITE PIEDRA

Authors: S. Maouni*; M. Meziane; K. Senouci

Author's affiliation:

Department of dermatology, Ibn Sina University Hospital of Rabat. Morocco

*Corresponding author:

Safae Maouni

maouni.safae88@gmail.com

1. Background:

White Piedra (WP) is a rare, asymptomatic, superficial fungal infection caused by yeast-like organisms of the *Trichosporon* genus. It commonly affects beard hairs' shafts, moustache, genitals, axilla and scalp.

2. Observation:

A 10-year-old girl presented for asymptomatic whitish particles in the scalp hair evolving since 6 months. It was encircling almost the entirety of the scalp hairs' shafts, easily detachable and measuring 1 to 1.5 mm. Dermoscopy examination showed whitish peripilar casts attached to distal parts of the hair with normal aspect of scalp skin. A detailed interrogation revealed the history of tying wet hairs after washing. The diagnosis of white piedra was suggested then confirmed by a mycological examination which revealed a *trichosporon asahii*. The patient was advised to keep the hair dry, and was treated with 2% ketoconazole shampoo topically daily for 2 months with oral fluconazole for 3 months. We noted a good evolution and disappearance of the casts after the treatment.

3. Key Message:

We described the clinical and dermoscopic features of a rare case of scalp white piedra caused by an infrequent species of trichosporon «*Trichosporon Asahii*». Human hair colonization may occur as a result of poor personal hygiene, persistence of warmth and moist on the scalp, and excessive use of hair oils. Dermoscopy guide the diagnosis by eliminating other defects such as traction hair cast, trichorrhexis nodosa and monilethrix.

ANALYSES OF 29 CASES OF TRICHOTILLOMANIA: TRICHOSCOPIC FEATURES

A. Mareeva*

State Research Center of Dermatovenereology and Cosmetology, Ministry of Health of the Russian Federation, Russian Federation

*E-mail: amareeva@gmail.com

1. Background: Diagnosis of trichotillomania is often difficult in clinical practice.

2. Aims and Objectives:

The aim of the study was to detect the main trichoscopic features of trichotillomania. This study included 29 patients with trichotillomania (female – 24, male - 5; between 7 and 52 years of age; children - 27, adults – 2).

3. Methods:

The diagnostic tools for the diagnosis of hair loss problem included a detailed history, examination of the scalp, eyebrows and eyelashes and trichoscopy.

4. Results:

Examination of the scalp revealed asymmetrical areas with low overall density and varying hair lengths mainly located in parietal and temporal regions in 22 patients; total process in 4 patients, trichotillomania without visible patches of alopecia – 3 patients, eyebrows – 4, eyelashes – 3 patients. Trichoscopy of trichotillomania showed hair with fraying of ends, breakage at different lengths, black dots, short and coiled hairs, tulip hairs, v – hairs, trichoptilosis and amorphous hair residues.

5. Conclusions:

It is important to consider various trichoscopic findings together to establish the diagnosis of trichotillomania. Thus, the most frequent trichoscopic features of trichotillomania in our study: black dots and broken at varying length hairs.

CLINICAL AND TRICHOSCOPIC EVALUATION OF ISOTRETINOIN EFFICACY IN DISSECTING CELLULITIS

M. Kurzeja,^{1*} M. Olszewska¹, L. Rudnicka¹

¹Warsaw Medical University, Poland

*Corresponding author: mkurzejaderm@gmail.com

Background: Dissecting cellulitis is a chronic, progressive, inflammatory disease starting with occlusion of follicular openings on the vertex or in the occipital area of the scalp. Afterwards it manifest as perifollicular pustules, nodules, abscesses and sinuses with interconnecting sinus tracts leading to scarring alopecia. Treatment generally fails to obtain a permanently successful result, therefore, many therapeutic options have been proposed. There are case reports in the literature showing successful treatment of dissecting cellulitis with isotretinoin.

Observation: We report patient with dissecting cellulitis treated with oral isotretinoin at a dose of 30 mg per day for 12 months. The diagnosis was made on a basis of clinical picture, trichoscopy and histopathological examination. Initially before treatment trichoscopy shows yellow structureless areas and yellow dots with a “three-dimensional (3D)” structure imposed over dystrophic hair shafts. Also black dots and pinpoint-like vessels with a whitish halo were present. After a year of treatment, all trichoscopic features of the active phase of the disease resolved, and only confluent ivory-white areas lacking follicular openings were visible.

Key message: This case report demonstrate the beneficial effects of isotretinoin in dissecting cellulitis and shows that trichoscopy is an excellent method for assessing the efficacy of treatment of scarring alopecia.

THE EFFICACY OF COMBINED THERAPY WITH INTRADERMAL CORTICOSTEROID INJECTIONS IN ANDROGENETIC ALOPECIA

N. Khutsishvili,¹ L. Rudnicka,² Y. Ovcharenko,³ I. Buchukuri⁴ and N. Lortkipanidze^{1*}.

¹David Tvildiani Medical University, Tbilisi, Georgia

²Medical University of Warsaw, Warsaw, Poland

³V.N. Karazin Kharkiv National University, Kharkiv, Ukraine

⁴Petre Shotadze Tbilisi Medical Academy, Tbilisi, Georgia

*Corresponding author: geotricholog@gmail.com

Background:

Androgenetic alopecia (AGA) is the most common form of alopecia in women and men. The recently described nonandrogenic cofactors of the etiology of AGA are focused on the study of microinflammation associated with the appearance of perifollicular lymphocytic infiltration. Trichoscopically, microinflammation is represented by perifollicular discoloration or perifollicular hyperpigmentation. This phenomenon is observed in 20-66% of patients and affects $32.4 \pm 4.7\%$ of hair follicles and correlates with a low response to topical minoxidil therapy. This has led to the search for anti-inflammatory therapy for patients with AGA.

Aims and Objectives:

The aim of our study was to evaluate the efficacy of the combined treatment of patients with AGA with topical minoxidil and intradermal injections of corticosteroids compared with monotherapy with topical minoxidil.

Methods:

46 patients: men (Norwood-Hamilton Stage I–IV) and women (Ludwig I–II) with AGA manifesting perifollicular microinflammation and with no previously recommended hair growth stimulants were included in a comparative study. The first group (23 patients) received topical minoxidil (5% concentration, 1 ml b.i.d) and intradermal injections of corticosteroids (triamcinolone acetonide 5 mg / ml once every 4 weeks), the second group (23 patients) received topical minoxidil monotherapy (5% concentration, 1 ml b.i.d). After 12 weeks of therapy, a comparative assessment of the total density of the hair was made using the phototrichogram method.

Results:

Provisional results of the therapy efficacy in two groups shows a positive trend in both groups with a predominant response to treatment in patients in the first group of 82.6% and 52.1% respectively.

Conclusions:

In our opinion, the provisional results of the study on the comparative efficacy of monotherapy with topical minoxidil and minoxidil in combination with intradermal corticosteroids require a longer observation period and further study of the comparative dynamics of other parameters of hair growth.

COMPULSIVE TRICHOSSES: CLINICAL CASES, TRICHOSCOPIC FEATURES

A. Mareeva*

State Research Center of Dermatovenereology and Cosmetology, Ministry of Health of the Russian Federation, Russian Federation

*E-mail: amareeva@gmail.com

1. Background:

Diagnosis of trichotillomania is often difficult in clinical practice.

2. Aims and Objectives:

The aim of the study was to detect the main trichoscopic features of compulsive trichoses. This study included 29 patients with trichotillomania, 2 – trichoteiromania, 1 – trichotillomania in combination with trichotemnomania.

3. Methods:

The diagnostic tools for the diagnosis of hair loss problem included a detailed history, examination of the scalp, eyebrows and eyelashes and trichoscopy.

4. Results:

Examination of the scalp revealed assymetrical areas with low overall density and varying hair lengths mainly located in parietal and temporal regions in 22 patients; diffuse hair shedding in 4 patients, eyebrows – 4, eyelashes – 3 patients. Trichoscopy of trichotillomania showed hair with fraying of ends, breakage at different lengths, black dots, short and coiled hairs, tulip hairs, v – hairs, trichoptilosis and amorphous hair residues; trichoteiromania – trichoptilosis and scaling.

5. Conclusions:

It is important to consider various trichoscopic findings together to establish the diagnosis of compulsive trichoses. Thus, the most frequent trichoscopic features in our study: black dots and broken at varying length hairs, trichoptiloses.

SCALP DYSESTHESIA IN A 9 YEAR OLD DIAGNOSED ON TRICHOSCOPY

DR. SAMIPA SAMIR MUKHERJEE^{1,*}

1MBBS,DDV,DDVL,FRGUHS(Pediatric Dermatology), Consultant Pediatric Dermatologist and Dermatologist, Cloudnine Hospitals, Bengaluru, India

*Corresponding author: drsamipamukherjee@gmail.com

1. Background:

Dysesthesia is used as a generic term for cutaneous symptoms such as pruritus, burning, tingling, stinging, anesthesia, hypoesthesia, tickling, crawling, cold sensation, or even pain—without a primary cutaneous condition in a well-defined location. It is often described as a condition with symptoms without any objective finding. The symptoms are often triggered by physical or psychological stress.

2. Observation:

A 9 year old male child, first born of non consanguineous marriage with an insignificant birth history was brought to the dermatology outpatient department with complaints of burning sensation and pain localised to the vertex area of the scalp of about 3months duration. The mother gave history of significant sibling rivalry and poor scholastic performance. He was treated with local application of topical steroid for three weeks elsewhere with no response. The mother had applied turmeric to the affected zone as a traditional home remedy for providing soothing effect with no response. Scalp examination revealed multiple broken and short hair on the vertex area with no obvious patchy hair loss. Trichoscopic examination revealed multiple broom hair with trichorrhexis nodosa in one of the hair. A provisional diagnosis of scalp dysesthesia was made and the child was referred for psychiatric evaluation where the diagnosis was confirmed and the child treated accordingly.

3. Key Message:

Trichoscopy serves as an important aid in the rapid diagnosis of common to rare disorders even when cutaneous clues are not obvious to the naked eye.

TRICHOSCOPIC FINDINGS IN 29 MEN WITH FRONTAL FIBROSING ALOPECIA. EXPERIENCE FROM A SINGLE CENTER IN ATHENS.

Vasiliki Chasapi, 1* Sofia Papanikou 2

1Head of Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece.

Email: chasapiresearch@gmail.com

2Dermatologist, Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece.

Background: Frontal Fibrosing Alopecia (FFA) is an acquired primary lymphocytic cicatricial alopecia, described by Kossard in 1994. The last 10 years there has been a large worldwide increase in the incidence of FFA, as well as occurrence in both premenopausal women and men. Trichoscopy is a valuable noninvasive method to differentiate clinically hair diseases.

Aims and Objectives: The main aim of this study was to research and document the trichoscopic findings of 29 male patients with a diagnosis of FFA attending the Department of Physiology-Hair Disorders at "Andreas Sygros" Hospital in Athens, Greece.

Methods: The studying process included a questionnaire for collecting demographic data and information on the patient's personal medical record as well as information on their family's record. The examination was carried out using a polarized and a non-polarized dermatoscope and pictures of the examined areas were taken as well.

A statistical analysis of the findings was conducted and once completed the study's final conclusions were drawn.

Results: The trichoscopic findings were similar with those that have been observed in women FFA patients. Differences in the severity of the disease were observed clinically and trichoscopically.

Conclusions: Although FFA was considered a female disease, it is also observed in men. Trichoscopy is a reliable and helpful method to diagnose most of hair diseases, especially FFA.

TRICHOSCOPY CLINCHES THE DIAGNOSIS OF NEONATAL SCURVY

1st DR. SAMIPA SAMIR MUKHERJEE,^{1,*} 2nd DR. PRATHAP CHANDRA², 3rd DR. ANKUR RAJVANSHI³, 4th DR. DEEPA MOHAN SHARMA³

¹Consultant Pediatric Dermatologist and Dermatologist, Department of Dermatology, Cloudnine Hospitals, Bengaluru, India

²Chief Consultant Neonatologist and Pediatrician, Department of Pediatrics, Motherhood Hospitals, Bengaluru, India

³Consultant Pediatrician and Neonatologist, Department of Pediatrics, Motherhood Hospitals, Bengaluru, India

*Corresponding author: drsamipamukherjee@gmail.com

1. Background:

Scurvy, a disease of dietary deficiency of vitamin C, is uncommon today. It is a condition characterized by general weakness, anemia, gum disease, and skin hemorrhages caused by a prolonged deficiency of vitamin C. Since the body is unable to synthesize vitamin C it predominantly relies on dietary sources for the same. Even though the number of people suffering from Scurvy has largely come down, poor diet or eating habits can lead to Scurvy. Literature suggests that children who suffer from autism spectrum disorders are more likely to suffer from scurvy. Although easy to diagnose when the signs and symptoms are obvious it may pose a diagnostic challenge in a neonate owing to the lack of classical symptoms and signs.

2. Observation:

A 3 day old male child born of normal delivery to nonconsanguineous parents was admitted to the neonatal intensive care unit as a floppy baby. Dermatological consultation was sought for the skin lesions on bilateral shin of lower limbs. Parents gave history of the lesions being present since birth. On cutaneous examination multiple grouped coiled and circle hair were noted over bilateral shins. Dermoscopic examination revealed multiple corkscrew and coiled hair with follicular and peri follicular purpura. The pale orange perifollicular halo described in literature was not seen in our case which could be due to the skin of color. Based on trichoscopic evaluation a provisional diagnosis of scurvy was considered. Serum testing revealed low plasma vitamin C level (less than 0.2mg/dl), which was consistent with the diagnosis of scurvy. Further investigation of the mother revealed low plasma vitamin C level although she was asymptomatic.

3. Key Message:

Trichoscopy serves not only as a rapid bedside investigative tool but also proves diagnostic in common to rare disorders which evades the naked eye examination.

EPIDEMIOLOGICAL FINDINGS OF 300 FRONTAL FIBROSING ALOPECIA PATIENTS. THE RESULTS FROM A SINGLE CENTER IN GREECE.

Sofia Papanikou,^{1*} Vasiliki Chasapi²

1. Dermatologist, Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece.

Email: sopavage@yahoo.gr

2. Head of Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece. (Email: chasapiresearch@gmail.com)

Background: Frontal Fibrosing Alopecia (FFA) is a cicatricial alopecia. In recent years there has been a worldwide increase in the incidence FFA.

Aims and Objectives: The purpose of this study was to record the epidemiological data of patients with FFA examined at "A. Sygros" hospital, as well as investigating the possible factors that may affect the disease, as there is no such study in Greece so far.

Methods: 300 patients with FFA were enrolled in the hospital, and a special questionnaire based on their socio-demographic and medical information was used in order to collect the data and to investigate the factors likely to be associated with the disease.

The Kolmogorov test for the regularity of distributions, the X²-test, the Mann-Whitney Test, the variance analysis was used as statistical analysis methods and the statistical program SPSS 22.0 for the analysis.

Results: 300 patients were studied, of whom 284 (94.7%) were women and 16 men (5.3%). Their age ranged from 26 to 92 years with an average of 61.7. The duration of the disease ranged from 0.5-32 years with an average of 6.6 years. 159 patients (53%) had a less than 1 cm recession, 93 (31%) had 1-2.99 cm, 35 (11.7%) 3-4.99, and 13 (4.3%) had 5-6.99cm. 12.7% of women had ovariectomy with an average ovariectomy age of 47 years (21-74). 56.3% of the patients were suffering from thyroid disease, 34% from hyperlipidemia, 22.7% from anemia, 15.7% from hypertension, 8% from osteoporosis, 7.7% from depression and 5.7% from allergies. 40.3% of them had a family history of androgenetic alopecia, and 13.3% FFA.

Conclusions: The completion of the study highlighted the epidemiological data of the patients and the findings are consistent with the results of relevant studies from the international literature.

COSMETIC COLOR PRODUCTS CAN MIMIC PATHOLOGICAL TRICHOSCOPIC FINDINGS: A RETROSPECTIVE ANALYSIS AND REPRODUCING TEST USING LEMON'S SKIN

M. Sachdeva,¹ M. Kinoshita-Ise ^{2,3*}, NH Shear^{1 2}

¹Faculty of Medicine, University of Toronto, Toronto, ON, Canada

²Division of Dermatology, Department of Medicine, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, ON, Canada

³Department of Dermatology, Kyorin University School of Medicine, Tokyo, Japan

* Misaki Kinoshita-Ise, M.D., Ph.D.: misakiku1005@yahoo.co.jp

Background: Tricoscopy is a helpful technique to diagnose hair disorders. However, deposition of cosmetic color products used for filling spaces, dyeing or voluminising hair can mimic concerning findings and confuse practitioners during observation. No previous studies has systematically analyzed the artificial trichoscopic signs due to hair dye usage.

Objectives: To identify artificial trichoscopy findings from cosmetic hair dye use and analyze the mechanism of their depotition.

Methods: Trichoscopic images, taken from patients who visited our hair clinic, were retrospectively reviewed to detected artificial findings. Additionally, currently-available over-the counter color products were applied to the skin surface of lemons to reproduce these artifacts.

Results: Color products applied to scalps were categorized into three types based on texture differences: fiber, liquid, and powder type. These findings were successfully reproduced on lemon skin, thus illuminating the putative mechanism of artificial staining. Dents stained by liquid-type resembled black dots and scattered artifacts by fibre-type mimicked broken hairs. Powder-type diffusely destributed over intra- and inter-dents spaces and developed irregular stains.

Conclusion: Artefactual trichoscopic can mislead practitioners especially when diagnosing major hair disorders including alopecia areata, trichotillomania, and tinea capitis. Thus, signs due to hair dye usage should be considered in the differentials.

PERMANENT CHEMOTHERAPY-INDUCED ALOPECIA: A COMPREHENSIVE DIAGNOSTIC ASSESSMENT THROUGH TRICHOSCOPY, CONFOCAL MICROSCOPY AND HISTOLOGY

M. Cantelli,¹ A. Patrì,^{1,*} M. C. Annunziata,¹ M. Vastarella,¹ P. Nappa,¹ Mirella Pace,² M. Mascolo² and G. Fabbrocini¹

Affiliation: ¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Via Pansini 5, Napoli, Italy;

²Department of Advanced Biomedical Sciences, Pathology Section, University of Naples Federico II, Naples, Italy

*Corresponding author: patriangela.ap@gmail.com

Background. Damage to hair follicles following exposure to toxic chemotherapeutics can cause substantial hair loss, commonly known as chemotherapy-induced alopecia (CIA). CIA is usually non-scarring, temporary and reversible and defined as permanent (pCIA) when lasts more than 6 months after stopping chemotherapy. No data exists on trichoscopic and reflectance confocal microscopy (RCM) features in pCIA patients, as well as the histopathologic criteria for this particular subset population are scant and not entirely defined.

Aims and Objectives. Our aim was to elucidate pCIA diagnostic profile through the use of three techniques: trichoscopy, RCM and histology.

Methods An observational study was conducted among patients suffering from pCIA. Acquisition of clinical images and trichoscopy were carried out using Fotofinder Medicam 800 HD. In the same areas where the trichoscopic images had been acquired, RCM was carried out via Vivascope 3000. A 4.0-mm punch biopsy was taken from each patient for histological sections.

Results. Most of the patients showed a shedding pattern characterized by diffuse alopecia with accentuation on the vertex. A pattern similar to AGA and alopecia areata could be considered as the trichoscopic expression of pCIA. Such data has been confirmed by both RCM and histology.

Conclusions. pCIA is probably an underestimated entity and still little investigated. More studies are needed to clarify the differences or the similarities between CIA and pCIA, with the aim to avoid the onset of such irreversible and psychologically devastating form of alopecia.

LICHEN PLANOPILARIS OVERLAP WITH FEMALE PATTERN HAIR LOSS: TRICHOSCOPY FINDINGS

Recoder M^{1*}, Mariotto F¹, Mariotto A¹, Drumond B¹

1. Instituto Mariotto Recoder, Belo Horizonte, Brazil.

* manuela@mrinstituto.com.br

Background: Female androgenetic alopecia is an asymptomatic disease with slow and progressive evolution presenting diffuse hair thinning most pronounced in the midline part of the scalp.

The pathogenesis is based on the miniaturization of dihydrotestosterone-mediated follicles in androgen-dependent areas of the scalp.

Anamnesis and physical examination including trichoscopy are enough to diagnose most of the cases.

Lichen planopilaris is the most common cause of primary immune-mediated cicatricial alopecia and it is part of the spectrum of lymphocytic scarring alopecias.

Observation: We present a case of a 43 years old female patient with both diseases coexisting.

Her prior complaint was hair thinning and decrease of hair density. During trichoscopy using a manual dermoscope device we detected thickness heterogeneity of hair shafts and increased proportion of vellus hair on frontal scalp but we also found a patch of alopecia on the occipital area with absence of follicular openings in a milk-red area, perifollicular erythema and concentric scaling around the follicles on the periphery of the patch.

The absence of follicular openings indicates cicatricial alopecia therefore we followed with a dermoscopy guided punch biopsy which confirmed both diagnoses: androgenetic alopecia and lichen planopilaris.

Key message: Whole scalp trichoscopy must be performed during consultation even though the patient has specific complaint. It is important to remember that different diseases can coexist.

PATTERNED TRICHOTILLOMANIA IN ANDROGENETIC ALOPECIA

L.E. Sánchez-Dueñas,^{1*} L. Rudnicka²

¹ Hair Restoration Center, Dermika Dermatologic Laser Center, Guadalajara, Mexico

² Department of Dermatology, CSK MSWiA, Warsaw, Poland

*Corresponding author: drlapeau@hotmail.com

1. Background:

Trichotillomania is a common disorder characterized by recurrent episodes of pulling hair from different parts of the body. The estimated prevalence for this form of traction alopecia is 0.5–2% in the general population that contrasts with prevalence of other types of hair loss as androgenetic alopecia that is up to 80% of men and 50% of women in the course of their life.

2. Observation:

We described three cases of adult men of 29, 37 and 42 years-old with Hamilton-Norwood II to V androgenetic alopecia under treatment with 5% topical minoxidil, oral finasteride 1 mg or oral dutasteride 0.5 mg. They were evaluated in follow-up appointments and concerned for worsening or non clinical response in most affected areas of the patterned hair loss. On trichoscopic evaluation irregularly broken hairs, v-sign and flame hairs were identified on vertex or sagittal areas. When interrogated patients accepted that pulling out the hair when increasing sense of tension, a constant touching on the most affected hair loss areas to corroborate hair regrowth or repetitive manipulation was a common behavior difficult to resist.

Over the last years trichoscopy has become an important technique that offers the proper diagnosis of trichotillomania by analyzing the hair shaft structure and size. Flame hairs, v-sign, tulip hairs and hair powder and in general irregularly broken hairs are the most important features. All these type of abnormal hair shafts were broken by the patient by traumatic pulling and this is particularly important in the correlation with disease pathogenesis. The psychosocial aspects of trichotillomania must not be underestimated. To the best of our knowledge this is the first case series report of compulsive traction alopecia in specific areas affected with androgenetic hair loss.

3. Key Message:

These three cases expose the importance of the use of trichoscopy in follow up consultations even in apparently well know patients because stress about the treatment outcomes and anxiety may lead to obsessive compulsive disorders in androgenetic alopecia patients where trichotillomania may coexist.

PRESSURE-INDUCED ALOPECIA: TRICHOSCOPY FINDINGS

Recoder M^{1*}, Mariotto F¹, Mariotto A¹, Drumond B¹

1. Instituto Mariotto Recoder, Belo Horizonte, Brazil.

* manuela@mrinstituto.com.br

Background: Pressure-induced alopecia (PIA) was first described in 1959 by Abel and Lewis and it is an unusual cause of hair loss.

It has been reported after long periods of immobilization during surgeries or prolonged hospitalization in Intensive Care Units and it is caused by localized ischemia leading to vascular congestion, pathophysiology is similar to pressure ulcers.

It typically presents with a discrete patch of hair loss within 3-28 days after procedure.

Observation: We report a case of PIA in a 38 year old male patient who had a nose job with total anesthesia. Total duration of the procedure was three hours.

One week after surgery a patch of alopecia was noticed on the occipital area. Patient reported a discrete paresthesia on the area right after surgery.

Trichoscopy revealed black dots, broken and dystrophic hairs and discrete erythema, all findings were permeated by normal hair shafts.

Spontaneous hair regrowth was observed at follow-up one month later.

Key message: Trichoscopy and histopathological features of PIA can overlap with those described for alopecia areata.

Even though in all cases of PIA there is a clear history of surgery or prolonged immobilization preceding hair loss, the causality may not be promptly established by the patient or physician.

But once the relation with head immobilization is established, the diagnosis becomes obvious.

MIDLINE DENSITY PROFILE – TRICHOSCOPIC EVALUATION OF HAIRLINE AREA. A PILOT STUDY.

1st J.Sicińska¹, 2nd K.Majda², 3rd M.Kasprzak²

¹ Dept. of Dermatology, CSK MSWiA, Poland

²TrichoLAB, Poland

*Corresponding author: j.sicinska@gmail.com

1. Background:

Frontal hairline has always been a beauty hallmark of a face. The architecture of hairline has not been thoroughly studied with trichoscopy. Two common hair diseases, androgenetic alopecia and frontal fibrosing alopecia, cause easily noticeable hairline abnormalities.

2. Aims and Objectives:

The aim of our study was to schematically depict distribution of hairs of given thickness within a certain area by creating Midline Density Profile.

3. Methods:

Trichoscopic examination was conducted on a linear area (1 cm x 7 cm), parallel to frontal medial line), starting 1 cm below hairline and moving upwards. Videodermoscope with a field of view of 6x18 mm was used and images were compounded „side to side” to form one image.

Imaging was performed in 15 patients with frontal fibrosing alopecia, 20 individuals with androgenetic alopecia (I, II and III Norwood Hamilton) and 30 healthy controls. Individuals with blond hair were not included to sustain optimal visibility.

Obtained images were analyzed: hair count and thickness of individual shafts were assessed.

4. Results:

In frontal fibrosing alopecia, the frontal hairline comprises solely thick hairs with appearance of mid-thickness hairs in the middle and upper segments of studied area. Additionally, density within anterior aspect of frontal line was lower than in controls and absence of vellus hairs was noticed.

In androgenetic alopecia, total hair density is generally preserved, with increased percentage of vellus hairs and lower density of terminal hair. In healthy controls, a significant variability of Midline Density Profile with varied percentage of mid-thickness hairs.

5. Conclusions: Midline Density Profile is a simple way to present normal and abnormal hairline in a quantitative fashion. Monitoring of frontal fibrosing alopecia as well as advanced planning of hair restoration may be improved with this approach.

SECONDARY SYPHILIS IN SCALP – REPORT OF CASE AND MAIN FINDINGS IN TRICHOSCOPY

Ana Cristina Schmidt Dorneles^{1*}, Isadora da Luz Silva¹, Natália Andressa Buss Venier¹, Camila Vargas Garcia¹, Leandro Damiani¹, Laura Luzatto¹ and Renan Minotto^{1,2}

¹ Hospital Santa Casa de Misericórdia de Porto Alegre, Brasil

² Coordinator and Prof of The hair and nail unit of the service

*Corresponding author: ana.s.dorneles@hotmail.com

1. Background:

A 38-year woman, 2 months ago with infiltrated, erythematous and itchy plaques on the scalp and with eyebrow and eyelash rarefaction. No other changes in clinical examination. On trichoscopy presented reddened areas, yellow dots, black dots, with rods sketching elbow shape and some repilation wires with pull test positive for anagen. Serologies were performed and treponemal and non-treponemal test were positive. The histopathology showed follicular miniaturization, perivascular and perifollicular lymphoplasmacytic inflammatory infiltrate, with negative fungal research. The diagnosis of syphilitic alopecia was confirmed.

2. Observation:

Alopecia may be an important sign to guide clinical diagnosis in relation to secondary syphilis. The *Treponema pallidum* has tropism by the protuberance epithelium capillary and peribulbar capillaries, the pathogenesis of syphilitic alopecia includes a peribulbar capillary vasculitis, which may cause perifollicular lymphocytic infiltration with dispersed plasma cells that disrupt the hair cycle. Thus, when syphilitic alopecia is the only manifestation of the disease, the differential diagnosis with other hair disorders may be more complex and therefore trichoscopy is so important and few publications describe the patterns of trichoscopy.

3. Key Message:

We describe this case of syphilitic alopecia with the findings of trichoscopy to aid in the diagnosis when alopecia is the only manifestation of the pathology.

TITLE -INEXPENSIVE MODIFIED CROSS-POLARIZED TECHNIQUE TO EVALUATE TRICHOGRAM.

Rachita Dhurat¹, Sandip Agrawal ¹, Sanober Burzin Daruwalla ^{1*}, Aseem Sharma¹, Ravina Surve¹, Smita Ghate ¹, Mithali Jage ¹

¹-L.T.M.M.C and G.H SION

Email Address- sanober46@gmail.com

1. Background: -Polarized microscopy involves the placement of two disc in microscope such that vibrating light falls perpendicular to each other and hence does not allow light to pass through eyepiece which makes the background appear black . Only doubly refractile objects like hair, crystals, amyloid, foreign body etc will illuminate against black background. Hair shaft anomalies like trichothiodystrophy, trichorrhexis nodosa will be better visualized in polarized microscopy also melanin clump deposition in hair shaft can be noted. However polarized microscopy is expensive and not easily available.

2. Aims and Objectives: To device an easy method of doing polarized microscopy with minimal resources.

3. Methods: We have devised a modified polarized microscope which requires minimal and easily available material . A trichogram slide is taken and a mirror is kept under the slide. The slide is then examined with a hand held or video-dermatoscope under polarization mode. Polarized light that is reflected by the mirror passes through the shaft of hair and the hair appear refractile. The hair shaft can be visualized more clearly and different findings like melanin deposition , tiger tail appearance etc can be better visualized .

4. Conclusions: Modified cross polarized microscope is indeed a very useful , cost effective ,easy to use and beneficial method which will help in making diagnosis of hair shaft related disorders easier .

HAIRLOSS AS A MANIFESTATION OF MALIGNANCY

1st J.Sicińska^{1,2*}, 2nd M.Jasińska^{2,3}, 3rd I.Walecka¹

1 Dept. of Dermatology, CSK MSWiA, Poland

2 Dermiq Medical Center, Poland

3 Dept. Of Dermatology, Medical University of Warsaw, Poland

*Corresponding author: j.sicinska@gmail.com

1. Background:

Various causes of localized hairloss have been identified. Neoplastic growth or infiltration may be a causative factor of follicle disfunction or damage.

2. Observation:

A serie of patients presenting with hair loss were diagnosed with breast cancer metastases to scalp, folliculotropic mycosis fungoides and primary cutaneous follicle centre lymphoma.

In breast cancer metastases, focal scalp hair loss was accompanied by erythematous background with prominent wide serpentine vessels.

In folliculotropic mycosis fungoides, numerous body hairless patches resembling alopecia areata with presence of black dots were found.

Primary cutaneous follicle centre lymphoma presented as an yelowish plaque with roundish thin winding vessels.

3. Key Message:

Malignancy should not be forgotten as a possible cause of hair loss.

TRICHOSCOPIC FINDINGS IN ALOPECIA RELATED TO EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITOR THERAPY

Magdalena Żychowska 1,*

1 Department of Dermatology, University of Rzeszów, Poland

*Corresponding author: magda.zychowska@gmail.com

1. Background

Epidermal growth factor receptor (EGFR) inhibitors are anti-cancer agents that may cause both scarring and non-scarring alopecia. There is scarce data in literature regarding trichoscopic findings in patients treated with this group of medications.

2. Observation

A 55-year-old Caucasian woman was referred due to extensive lesions on the scalp and skin rash, gradually increasing for two months. She has been treated with afatinib (EGFR inhibitor) for lung cancer (T4N2M0) for the last two years. Physical examination revealed pronounced erythema with extensive serous and purulent crusts tightly attached to the scalp, disseminated pustules and erosions with a predilection for the face, pubis and armpits and pyogenic granuloma-like lesions of the nailfolds. After removal of the crusts using detreomycin oil, scalp trichoscopy revealed numerous perifollicular pustules, tapering and distorted hair, single black dots, perifollicular scaling with perifollicular casts and extensive milky-red areas without hair follicles but with irregularly distributed pustules. Trichoscopy of the eyebrows showed several perifollicular pustules, perifollicular scaling and irregular pink areas.

3. Key message

EGFR inhibitors can lead to permanent hair loss and trichoscopy may help in early recognition of patients at risk of developing scarring alopecia. Further studies of trichoscopic findings are needed in order to better understand the course and prognosis of alopecia due to EGFR inhibitors.

LASH COMPARATIVE TRICHOSCOPY IN MONITORING LID MARGIN LESION GROWTH

1st J.Sicińska^{1,2*}, 2nd I.Walecka¹

1 Dept. of Dermatology, CSK MSWiA, Poland

2 Dermiq Medical Center, Poland

*Corresponding author: : j.sicinska@gmail.com

1. Background:

Precise size assessment of eyelid lesions is very difficult. The reasons for this are: inability to measure a lesion directly due to winking, tearing and patient's defence reflexes.

Eyelash orifices' localization has been observed to remain unaltered over long periods of time.

Small malignant lesions such as nodular basal cell cancer may remain unnoticed until they cause focal loss of lashes.

2. Observation:

An 11-year old girl was sent by a paediatrician for a dermoscopy of an right eye lower lid nevus. A pigmented lesion has been observed over a period of 10 months. The growth of a nevus was assessed basing on its position versus eyelash orifices. Due to the observed lesion enlargement, the girl was referred for lesion surgical removal.

Other cases of eyelid lesions altering growth of lashes are presented.

3. Key Message:

We present the possibility to use observation of eyelash orifices' pattern to assess any eyelid growth and to conclude about its possible malignant character.

TRICHOSCOPY OF SCALP SARCOIDOSIS: A USEFUL CLUE TO DIAGNOSIS

F. Khammouma 1, A. Souissi 1* I. Ben Ghorbel 2, M. Mokni 1

1 Dermatology department. Rabta hospital. Tunisia

2 Internal medicine department. Rabta Hospital. Tunisia

*Corresponding author: dr.asmahanesouissi@gmail.com

1. Background: Sarcoidosis is a multisystem granulomatous disorder of unknown etiology that may involve various tissues and organs. It often includes cutaneous manifestations. Rarely, involvement of the scalp can occur, which might lead to cicatricial alopecia. We describe a case of sarcoidosis of the scalp and its trichoscopic features.

2. Observation: A 40-year-old woman presented with a two-year history of patchy alopecia. Clinical examination showed erythematous, annular, infiltrated alopecic patch in the frontal area of the scalp. Dermoscopy of the plaque showed the absence of follicular ostia, orange round spots, telangiectasias and multiple dystrophic hairs. The patient had histopathological evidence of sarcoidosis.

3. Key Message: Sarcoidal alopecia is rare, mainly described in African American women. Alopecia in scalp sarcoidosis is a result of the destruction of the hair follicles by the granulomatous formation and is often associated with a high incidence of systemic sarcoidosis. Dermoscopy shows orange spots corresponding to the round, well-formed granulomas in the superficial dermis. These spots differ from the yellow dots of alopecia areata as they are larger and do not correspond to follicular openings. Telangiectasias, as seen in our patient, correspond to vasodilatation in the papillary dermis. The presence of dystrophic hairs probably indicates the activity of the disease.

THE RARE CASE OF BREAST CANCER METASTASIS LOCATED ON THE SCALP DIAGNOSED BY TRICHOSCOPY EXAMINATION.

Agnieszka Szmurło MD1 , Elżbieta Kowalska-Oleńczka MD, PhD 1*, Łukasz Grzęda MD2,
Piotr Ciechanowicz MD1, Klaudia Dopytalska MD1, Irena Walecka-Herniczek MD, PhD1

1.Department of Dermatology, CMKP/ Central Clinical Hospital of MSWiA in Warsaw,
Poland

2.Magodent, Department of Clinical Oncology in Warsaw, Poland

*Corresponding author: e.kowalskaoledzka@gmail.com

1.Background: Breast cancer is the most diagnosed cancer in women worldwide. Cutaneous metastasis are uncommon and often mean advanced stage of cancer. We present a rare case of breast cancer metastasis located on the scalp which was diagnosed very quickly thanks to trichoscopy examination.

2.Observation: The case study patient is a 61-year-old woman with a pale, painless node on the scalp, noticed 3 months ago. The patient had a history of a breast cancer 4 years ago, successfully treated with chemotherapy. Laboratory tests as well as lymph nodes' USG, mammography, abdominal USG and chest CT scan showed complete remission. The observed node was pale pink and had 7 mm in diameter. In trichoscopic examination the singular, irregular vessels on pale background were present. The following histopathological examination revealed the metastatic lobular carcinoma, later confirmed with the immunohistochemical technique, which shown CK 7(+in single cells), E-cadherin(-), estrogen receptors (100% cells), progesterone receptors(-).The malignant meninges infiltration was discovered in the CT scan and MRI examination.

3.Key Message: In group of patients with oncology history every single abnormal skin lesion should be considered as a metastases even in the cases without any abnormalities in laboratory and imaging tests. Trichoscopy examination is helpful and can be used in diagnostic process although the final diagnosis is proven in the histopathology examination.

VASCULAR PATTERN- A NOVEL TRICHOSCOPY PARAMETER IN ALOPECIA NEOPLASTICA

G. Takáčová^{1,*} and Z. Baranová¹

¹Department of Dermatovenereology, Faculty of Medicine- University of P. J. Šafárik and University Hospital of Louis Pasteur, Košice, Slovakia

*Corresponding author: gabi.takacova@gmail.com

1. Background: Scalp tumors are rare neoplasms accounting for 2% of all skin tumors.

Cutaneous metastasis from primary visceral malignancy is a relatively uncommon clinical entity, with a reported incidence of 0.22%–10% among various series. Alopecia neoplastica represents a rare form of cutaneous metastasis, in which underlying cancer spreads to the scalp, while replacing normal adnexal structures and hair follicles. We present a case of scalp metastases where trichoscopy revealed novel characteristic features that can help a clinician in earlier diagnosis even the primary tumor has not been diagnosed yet.

2. Observation: The current report presents a case of a 63-year-old female with advanced invasive ductal breast carcinoma (estrogen receptor-positive, progesterone receptor-positive subtype) in her right breast from february 2010 who developed scalp metastasis during the period of systemic hormonal treatment. In january 2019 the patient noticed symptomatic patchy hair loss initially presented as scalp dysesthesia or a painful sensation on the scalp. Clinically, the lesions (measured from 8 to 10 cm) were presented as indurated erythematous plaques with overlying teleangiectasias on the vertex and temporal scalp. Trichoscopy revealed an atypical vascular pattern and diffuse erythema, different from the already reported case. It suggests, than the scalp metastasis from the same type of carcinoma, can be presented by different clinical and trichoscopic features. Peripheral black dots were not revealed. Higher magnification highlighted the already mentioned vascular pattern, with dilated, serpentine, and polymorphic vessels and absent follicular openings and epidermal atrophy. The clinical examination resembled the diagnosis of scarring alopecia, most likely pseudopelade of Brocq. The diagnosis of scarring alopecia is challenging because of overlapping features clinically and histopathologically. Atypical vascular pattern was however suspicious for neovascularization, which is not the pattern seen in pseudopelade of Brocq. Histologic examination of a punch biopsy revealed a carcinoma compatible with a mammary origin, so confirmed the diagnosis of metastatic breast cancer.

3. Key Message: Alopecia neoplastica must be differentiated from several benign conditions, as cutaneous metastases often mimic other skin lesions. Trichoscopy represents a valuable, noninvasive technique for the evaluation of different types of alopecias. The diagnosis of alopecia neoplastica may be very challenging and in case of scarring localized alopecia, a differential diagnosis with metastasis should always be considered. Further consideration of the scalp lesions among patient with breast cancer is recommended and it is necessary to establish a full evaluation of any cutaneous lesion in patients with internal malignancies. Occurrence after years of follow-up is possible. Trichoscopy may provide quick and reliable diagnosis and obviate the necessity of scalp biopsy.

LICHEN PLANOPILARIS NON-POLARIZED DERMOSCOPY FEATURES

1st A.R. Zhelonkin,¹ 2nd M.V. Oganesian¹, 3rd I.O. Smirnova¹ and E.E. Pakhomova¹

¹Saint-Petersburg State University, Medical Faculty, Department of Infectious Diseases, Epidemiology and Dermatovenereology, Saint-Petersburg, Russia

*A.R. Zhelonkin: zhelonkin.a.r@yandex.ru

1. Background:

Lichen planopilaris (LPP) and frontal fibrosing alopecia (FFA) dermoscopy is described in detail. We assume that possible findings might depend on the dermoscope used.

2. Aims and Objectives:

The purpose of the study is to see whether handheld dermoscope findings align with publications where high magnification dermoscopes prevails.

3. Methods:

For examination of our patients we used non-polarised HEINE delta 20 dermoscope with a maximum magnification of 10x. A total of 18 patients with LPP and 5 patients with FFA were examined.

4. Results:

The most common signs in both LPP and FFA are white dots (18/18, 100%; 5/5, 100%) and the absence of hair follicles (18/18, 100%; 5/5, 100%). Other signs are perifollicular scaling (LPP – 9/18, 50%, FFA – 2/5, 40%); perifollicular brown pigmentation (LPP – 10/18, 58%; FFA – 3/5, 60%). Elongated linear vessels and concentric peripheral vessels were found in 1/18 LPP (5%) and in 1/5 (20%) FFA patients.

We observed several dermoscopy features exclusively in LPP cases. For example perifollicular erythema (5/18, 29%) and yellow dots (5/18, 29%) were encountered. In 2/18 LPP patients (11%) we found brown reticular pigmentation, purple zones, vellus hair, dystrophy of the hair shafts and broken hairs. Only 1 LPP patient had Wickham striae.

Hyperkeratotic plugs were observed in 1/5 (20%) FFA patients

5. Conclusions:

We conclude that the most common dermoscopy signs in LPP and FFA were white dots, lack of hair follicles, perifollicular scaling and brown pigmentation. Certain discrepancy with existing literature can be seen in the prevalence of observed signs, which can be the result of the dermoscope specificities or disease process. The subject needs further investigation

LICHEN PLANOPILARIS TRICHOSCOPY: A RETROSPECTIVE STUDY OF 8 CASES

M. Tabka*, S. Mokni, A. Aounallah, R. Gammoudi, L. Boussofara, N. Ghariani, B. Colandane, M. Deneguezli

Department of dermatology, Farhat Hached Hospital, Sousse, Tunisia

mariammmmtabka@gmail.com

Background: Lichen planopilaris (LPP) is a common form of primary cicatriciel alopecia. The perifollicular inflammation characterizes this entity and may explain the trichoscopic findings.

Aims and Objectives: The aim was to describe the clinical and trichoscopic features of LPP.

Methods: A retrospective observational study was performed by reviewing medical records of patients with LPP attending Farhat Hached Hospital, Tunisia in the last 2 years. . Inclusion criteria were a documented histopathologic diagnosis of LPP and the availability of high quality dermoscopic images.

Results: Eight patients were included, 6 were female (age range=12–60 years). Clinically, 6 patients were retrospectively diagnosed as having LPP and 2 as having frontal fibrosing alopecia (FFA). The most common presenting symptoms were patch hair loss, follicular hyperkeratosis and pruritus. The mean duration of the symptoms was 8 months. Lichen planus involvement was observed in one patient. The most common trichoscopic features noted in our series were absence of follicular openings (n=8), peripilar scaling (n=7), followed by milky-red areas (n=5) and classic white dots (n=4). Perifollicular scaling were combined to tubular casts (n=2) and blue-grey dots in a target pattern (n=2). In patients with FFA, we identified ivory-white background associated with “Lonely hair”. The last trichoscopic feature of LPP was Wickham striae (n=1).

Conclusions: As in other reports, the majority of patients with LPP are women. Our trichoscopic findings were similar to trichoscopic features for LPP in previous studies. Wickham striae are very rare in LPP of the scalp and may reflect hypergranulosis. “Lonely hair” and ivory-white background are most commonly observed in FFA.

Roundish structures in trichotillomania : A new observation in Trichoscopy

1 Balkrishna P Nikam *, 2 Balachandra S Ankad

1 Department of Dermatology, Krishna Institute of Medical Sciences, Karad-415110, India

2 Department of Dermatology, S Nijalingappa Medical College, Bagalkot-587103, India

*Corresponding author- Balkrishna P Nikam, mangeshnikam@yahoo.com

Background: Trichotillomania (TTM) presents as patchy hair loss on the scalp, eyebrow or in the beard area due to the urge to pull the hairs. History and clinical morphology is adequate for the arrival diagnosis. In confusing cases, wherein the history of hair pull is absent or not observed by the parents, histopathology is the gold standard in confirmation of diagnosis.

Trichoscopy, the dermoscopy of hair and scalp, play an important role in the identification of TTM by demonstrating characteristic and specific findings. Trichoscopic findings include broken hairs, black dots, exclamation mark hairs, V-hairs, tulip hairs, flame hairs, follicular hemorrhages and hair powder. Recently, i- hairs and mace hairs are described in the literature as prognostic and diagnostic trichoscopic patterns in TTM respectively. Forceful hair pulling results in the breakage of cuticle and follicular damage that are attributed in the hair shaft and follicular changes. It is evident, by the reports, that trichoscopic examination revealed new findings in TTM and it would continue to demonstrate new changes in future too. Here authors evaluated new trichoscopic finding in TTM and correlated with histopathology

Observation: We evaluated five cases that presents with patchy hair loss on the scalp. Cases were examined in tertiary care centres after obtaining informed consent. Demographic data in respect with age, sex, education, occupation, socioeconomic status and duration of disease were noted. All subjects were female with age range of 40 years to 50 years and duration of disease was between 5 months to 12 months. Site of affection was vertex and temporal part of scalp.

History of itching, scratching and pulling of hair was present in all cases. Dermoscopic examination of alopecic patch was done with DermLite DL 4 with 10x magnification. It revealed black dots, broken hairs, V-hairs, flame hairs which were consistent with the diagnosis of TTM. In addition to these findings, roundish gray structures around broken hairs were noted. Black dots, keratin, and sebum (yellow dots) were present inside these round structures. Double edged

blackish-gray rim was noted at the periphery of each round structure. Follicular scaling was also seen. Histopathology showed reduced number of follicles, few dystrophic hairs and pigment cast with trichomalacia that are suggestive of TTM. We believe that roundish structures around follicle correspond to perifollicular fibrosis which is analogous to peripilar sign observed in pattern hair loss. Trichoscopic and histopathological features were noted in all the five cases.

Conclusion: Trichoscopy, being non-invasive diagnostic technique, shows characteristic patterns in TTM and there are numerous new findings that are being reported in literature time to time. Roundish gray structures are not described previously in TTM. Hence, it is new observation in trichoscopy of TTM. However, it is observed in small number of cases, further elucidation of this finding involving large sample size is recommended.

An Overview on scalp micropigmentation in combination with hair transplant for severe hair loss cases

SALAS SARA L

Institution 1, Baja Hair Center, Tijuana, Mexico

Hair loss is a common problem for both men and women with the potential to impact negatively on self-esteem and psychosocial functioning. A variety of medical and surgical treatment options are available, depending on the type of alopecia. Many patients frequently come seeking advice about additional options to hide or reduce the appearance of hair loss.

Here, we review the SMP, scalp micropigmentation technique in combination with surgery to help the appearance of hair loss, and we will discuss their associated costs, advantages and disadvantages. Knowledge of the different treatments combinations that we have available can better equip clinicians to respond to questions from concerned patients, but may provide additional options to help these patients best cope with their hair loss.

-Scalp micropigmentation(SMP): is a semi-permanent hair and scalp concealer.

A variety of alopecias are refractory to treatment and cosmetic deformities, resulting in some dermatologic diseases, like alopecia areata or scars caused by facelifts, burns, hair restoration surgeries, etc. They have had a few, if any, good, permanent solutions, impacting millions of men and women. This technique should, therefore, catch your attention because it is a great semi-permanent option which last in most cases at least 5 years and can be repeated, is for patients who do not have enough hair for good coverage, including those who do not want to have surgical procedures to treat their balding or the female patient who is thinning and may decide to use SMP as a permanent concealer.

A patient who does not have enough hair to undergo a hair transplant. A patient on medical therapy that wants a rapid solution while responding to treatment. Some patients develop surgery phobia after multiple hair transplantation procedures and decide not to pursue surgical options despite their hair loss. Scars from different causes can be concealed with SMP, making it minimally detectable, offering to the patient a good nonsurgical alternative treatment.

SMP functioning as a semi-permanent tattoo in a stippling pattern as dots is created between the pores of a balding scalp. That mimics hair follicles that are cut close to the scalp, creating the illusion of texture and fullness, to address the desired results worked out between the provider and the patient. We carefully selected the pigments to match the hair color of the patients. A change in the hair style is not needed because this can be done with the hair remaining long or on a shaved scalp. Patients can undergo the procedure comfortably without interrupting their daily lives. Also those patients that doesn't have enough donor area we can combine hair restoration with SMP to give to the patient a fuller appearance.

Conclusions : Scalp micropigmentation with or without surgery provide a cosmetically effective solutions for patients with alopecia to improve their physical appearance. The combinations of these techniques improve the psychosocial functioning of a lot of our patients. We find it helpful to discuss the many options of cover up with patients with severe alopecias. We will show different videos of SMP, how to performe it and a lot of before and after photos.

SIMPLE ECONOMICAL INNOVATIONS IN DERMOSCOPY OF HAIR, NAIL, MUCOSA

Authors –

Sayyad ATH1, Sharma A1, Agrawal S1, Dhurat R1, Daruwalla S1

Author information:

1 Department of Dermatology, Lokmanya Tilak Municipal Medical College (LTMMC) and Sion General Hospital, Mumbai, India.

1. Technical Challenges:

Dermoscopy is an in vivo and non –invasive technique used for improving diagnostic accuracy by doing microscopic examination of lesions. Dermoscope is a handheld instrument used for dermoscopy. Dermoscopy of scalp / hairy area is called as Trichoscopy while dermoscopy of nails is called as onychoscopy.

Trichoscopy specifically and dermoscopy in general, carries a potential hazard of transmitting infection and infestations to patient as in cases of pediculosis capitis, tinea capitis etc. This is particularly challenging while performing dermoscopy of mucosal areas. Current practice to solve the problem is by placing glass slide between lens and lesion. Edges of the glass slide being sharp can pose a risk of injury. Glass slide is difficult to fit on curvature of scalp and in narrow areas like oral cavity and labia minora owing to its length. Another approach is to clean the lens with sanitizer to disinfect, which can hamper the clarity of lens.

Trichoscopic guided biopsy, or biopsy assisted by dermoscopy, is steadily gaining popularity, as it allows for optimal clinicopathologic correlation. (1)The technique has been used to improve diagnostic yield in pigmented lesions, (1) cicatricial alopecia, and skin tumors. (2) In our opinion, it can also be used to delineate dermoscopic and trichoscopic findings for biopsy. Stabilization of the dermatoscope in mid air during conventional dermoscopic guided biopsy (2) is difficult, and focusing over a target area for a long time until the desired biopsy site has been marked is inconvenient.

Also frequently clinicians face challenge in onychoscopy in getting clear view due to curvature of nails. We describe, herein, simple economical and easily reproducible solutions to these frequently encountered problems in clinical settings.

2. Solution:

The authors used a transparent adhesive tape to be applied on the lens of dermoscope with adhesive side on lens and non adhesive side on the side of lesion. The adhesive tape should be replaced after each examination. Tape is readily available, cheaper than glass slide and also doesn't pose any risk of injury. Furthermore, few additional turns can be wrapped around the sides of dermoscope to prevent contact between scope and adjacent hairs as well as narrow mucosal surfaces like labia minora or buccal cavity.

Authors devised a dermatoscope adapter by using barrel of 50cc syringe. Bottom of the adapter should be held in contact with scalp while dermatoscope should be mounted on the other end. Authors created a window in adapter to facilitate taking biopsy while doing dermoscopy simultaneously.

To overcome the difficulty in doing onychoscopy caused by curvature of nail, authors used a slab made from agar or gelatin powder. Agar or gelatin powder is dissolved in hot water and allowed to cool in ice tray. This slab is then placed on nail surface while doing onychoscopy. Gelatin or agar slab being soft and pliable, adapts to nail curvature and allows smooth operation of dermoscope. It also enhances transparency of eponychium and reduces reflection of light, thus enhancing visibility of pigmented lesions of nail. (3)

3. Key Message:

Above mentioned solutions for commonly encountered problems during dermoscopy are simple, economical and encompass utilization of readily available substances. Owing to ease of reproducibility, these innovations will be of immense help in clinical settings.

4. References:

1. Bomm L, Benez MDV, Maceira JMP, Succi ICB, Scotelaro MdFG. Biopsy guided by dermoscopy in cutaneous pigmented lesion-case report. *Anais brasileiros de dermatologia*. 2013;88(1):125-7.
2. Chuh A, Zawar V, Fölster-Holst R. Dermoscope-guided lesional biopsy to diagnose EMA+ CK 7+ CK 20+ extramammary Paget's disease with an extensive lesion. *Journal of the European Academy of Dermatology and Venereology*. 2018;32(3):e92-e4.
3. Kaminska-Winciorek G, Spiewak R. Tips and tricks in the dermoscopy of pigmented lesions. *BMC Dermatology*. 2012;12(1):14.

CATCH THEM ALL: TRICHOSCOPIC DIAGNOSIS OF EARLY FRONTAL FIBROSING ALOPECIA

David Saceda-Corralo, Marta Rubio-Lombraña, Rocío Gil-Redondo, Ángela Hermosa-Gelbard, Claudia Bernárdez, Óscar M. Moreno-Arrones, Sergio Vañó-Galván.

The prevalence of frontal fibrosing alopecia (FFA) is increasing among population. Early detection of the disease is very relevant to start treatment and stop progression of the alopecia. However, diagnosis of very initial cases is challenging and clinical examination may not be sufficient. Trichoscopy may be an excellent tool to early detection of FFA. The aim of this study is to describe the trichoscopic features of early stages of FFA and find new trichoscopic patterns to help in its diagnosis.

We designed an observational cross-sectional study including patients with FFA in early stages. Patients included had a frontotemporal hairline recession less than 5 mm and fulfilled the diagnostic criteria of FFA. Dry trichoscopy was performed using FotoFinder medicam1000® (Fotofinder Systems GmbH, Germany). For comparison between groups we used the Chi-square test, as appropriate. All given P-values are two-tailed and values of <0.05 indicates statistical significance. All analyses were performed using SPSS 23.0 statistical software package.

A total of 35 woman and 3 men with FFA were included. A total of 70 trichoscopic images from the frontal hairline were analysed. Twelve patients needed a punch biopsy to reach final diagnosis. Common trichoscopic features observed were loss of vellus hairs (91,4%; partial loss in 25,7% and complete loss in 65,7%), yellow dots (41,4%), black dots (40%) and white dots (40%). Perifollicular erythema and scaling were present in 27,1% and 37,1% of the cases, respectively. Thin vessels (arborizing, linear or lace-like) were found in 27,1% and a patchy brown honeycomb pattern was observed in 22,9% of the cases. Pili torti (24,3%) and upright regrowing hairs (22,9%) could be also observed, as well as shiny white structures such as rosettes and crysalides (20%).

Combination of several trichoscopic features was the most common presentation. Statistical analysis established there are three trichoscopic patterns: 1) Loss of vellus hairs +/- white dots +/- patchy honeycomb pattern (approximately 65% of the cases); 2) Partial loss of vellus hairs +/- yellow dots +/- black dots +/- thin vessels +/- shiny white structures (approximately 25% of the cases); 3) Vellus hairs preserved +/- black dots +/- peripilar scaling +/- perifollicular erythema +/- pili torti (approximately 10% of the cases).

In conclusion, we present the first systematic description of trichoscopic features in early stages of FFA. Recognizing these three trichoscopic findings may help clinician to early detection of the disease

Alopecia in Vitamin D-dependent rickets

Sahli F, Souissi A, Alaoui F, Mokni M

Dermatology department, Hosiptal LA Rabta, Tunis, Tunisia

1. Background

Vitamin D-dependent rickets type II A is a rare hereditary affection. It occurs due to mutations in the gene, which codes for vitamin D receptor.

This abnormality of the vitamin D receptor VDR create a resistance of target organs to the action of vitamin D and alopecia.

2. Observation

A 22 year old woman, from a third degree consanguineous marriage, with a history of vitamin D dependent rickets, presented for an extensive alopecia starting at three months of age with keratotic papules on the face and trunk. His physical growth was low according to the age. She had a skeletal deformation of the lower limbs. There was diffuse alopecia over the scalp, axillary, pubic area and limbs. Sparse hairs on the eyebrows, eyelashes and some occipital hair were present. Scalp trichoscopy showed fine hair, absence of hair follicles and hairs with multiple Pohl-Pinkus constrictions.

Biopsy from a papule showed mid-dermal keratin cysts.

3. Key Message

Vitamin D-dependent rickets type II A clinically represents growth retardation presenting in the first year of life and frequently associated with alopecia totalis.

The development of the hair follicle is normal but the hair follicle cycle is aberrant. Posterior hair loss begins 3 to 4 weeks after birth. Trichoscopy showed an absence of hair follicle, white dots corresponding to fibrosis and vellus hairs.

Pohl-Pinkus constrictions" refers to zones of decreased hair thickness within the hair shaft.

The observations from trichoscopy and scanning electronic microscope of two sisters suffered kerion caused by *Trichophyton mentagrophytes*

Xin Ran¹, Mi Wang¹, Yuping Ran^{1*}

¹Department of Dermatovenereology, West China Hospital of Sichuan University, Chengdu, China

*Corresponding author: ranyuping@vip.sina.com

clinical case:

1. Background:

I. A 9-year-old girl (elder sister) presented with papules, plaques, abscess on the face and huge ulceration on her scalp for 1 month. 3 weeks ago, she took abscess incision drainage undergoing general anesthesia twice in local hospital.

II. A 8-year-old girl (younger sister) presented with plaques and abscesses with itching on the scalp for 1 week.

2. Observation: Trichoscopy, pathological features and pathogen identification

1. For elder sister, trichoscopy present many damaged hair and abscess. Under fluorescence microscope examination, large number of hyphae were detected around the hair. Specimens from scalp and hair were put into SDA and Blood Agar at 25°C for 4 days and 4 weeks, the white colonies were cultured. The pathogen was defined as *Trichophyton mentagrophytes* from ITS 1 & 4 primers based on PCR, and sequence.

2. For younger sister, trichoscopy present erythema and abscesses. Under fluorescence microscope examination, also can find large number of hyphae around the hair. Under scanning electron microscope, the hyphae were obviously shown on the surface of infected hair.

Diagnosis and treatment

Both girls' diseases were confirmed as kerion caused by *Trichophyton mentagrophytes*. Oral itraconazole 100mg/d, topical use of naftifine ketoconazole cream, after wash with 2% ketoconazole shampoo were administrated. After treated for 21 days, the plaques and abscess of elder sister was improved, the size of ulceration shrank. And after treated for 23 days, plaques and abscess improved without any scar.

3. Key Message: Tinea capitis is most common in children aged 3 to 7. Kerion is a relatively rare infection of children's tinea capitis, mainly caused by *Trichophyton*, which has a very strong inflammatory reaction to the patient, and can present hair loss, follicular pustule or even fuse into abscess. It is easy to be misdiagnosed as bacterial infection, such as impetigo pustule, and ignore antifungal treatment. Thus patient may suffer from scar of the scalp or permanent hair loss, which seriously affect the physical and mental health of the patient. Our case of these two sisters were both infected with *Trichophyton mentagrophytes*. The possible transmission factors were sharing bed and pillow, playing and touching with each other, and having wrong treatment. It is so sad that the elder sister had taken skin transplantation surgery twice because of the misdiagnosis. However, once the fungal examination was done, the diagnosis and treatment were much easier to be decided.

TINEA CAPITIS IN AN ELDERLY WOMAN: TRICHOSCOPY AS A CLUE TO THE DIAGNOSIS

M.Rouai,¹ A.Souissi² , N.Toukebri, H.Touati and M.Mokni*

¹department of dermatology, Tunisia

²Department of dermatology, Tunisia

*Corresponding author: dr.asmahanesouissi@gmail.com

Background: Tinea capitis (TC) is a parasitic dermatosis caused by dermatophytes. It is usually observed in children. The epidemiological profile of TC has changed in recent years. This pathology is seen more and more in the elderly.

Observation: Eighty eight-years-old patient consulted for scalp pruritus. Physical examination revealed an erythematous-scaly plaque on the vertex. There was no alopecic plaques. The direct mycological examination was negative. The diagnosis of scalp psoriasis was made. The patient was put on dermocorticoids and antihistaminic. Two months later, the patient's condition didn't improve. Trichoscopic examination showed scaling, erythema, comma hairs and corkscrew hairs. Culture has isolated *Trichophyton violaceum*. The patient was treated with oral griseofulvin and local antifungals.

Key message: In the elderly woman, the increase in the incidence of TC would be due to a drop in the secretion of fungistatic sebum by a decrease in estrogen levels. TC in adults frequently has atypical aspects and mimics other pathologies such as pustulosis, seborrheic dermatitis or psoriasis as in our case. In addition, the absence of alopecia in adults has been reported in 62% of cases. As a result, the diagnosis is often delayed. Trichoscopy is a technique which helps to correct the diagnosis in atypical clinical presentations or when the parasitological direct examination is negative as in our case.

Trichoscopic Findings in Syphilitic Alopecia: Report of 4 cases

Syphilitic alopecia is a rare clinical manifestation of secondary stage, being classified into essential alopecia and symptomatic alopecia. Trichoscopy can contribute to differentiation diagnosis of this disease from others more common like areata alopecia and trichotillomania.

This is a prospective and descriptive study that is been developing, and some preliminary data will be reported here. It is consisting of 44 patients with serological diagnosis of syphilis, who underwent complete physical examination and trichoscopy. All patients that had plaques were included and reevaluated after three months.

In total 44 patients who were included, 35 (80%) males and nine (20%) females with a mean age of 32 years. Of these, four patients (9%) had alopecia, three male and one female, and all of them had symptomatic alopecia and two did not noticed hair plaques. Two patients were HIV positive and VDRL vary from 1:64 to 1:1064. Some trichoscopy findings were: thin hairs, elbow-shaped hair or angulated hairs with one sharp angle, empty follicular ostia, hypopigmented hair, circle hair and hypopigmented segmented hair occur in one of them. All patients were treated for syphilis with benzathine penicillin and had total repilation after three months.

Syphilis remains a public health problem and increasing world cases could cause an addition occurrence of rarest sign and symptoms like alopecia, and dermatologist must considered this differential diagnosis in all patients with plaques or diffuse alopecia, since syphilis remains the mimicking disease. Some trychoscopy findings observed in this project like circle hair, elbow-shaped hair or angulated hairs with one sharp angle and hypopigmented segmented hair have not be described before, providing some newer knowledge about syphilitic alopecia.

THE DERMOSCOPIC FEATURES OF SCALP DAMAGE DURING PEMPHIGUS

A. Abdelmouttalib¹, M. Meziane¹ and K.Senouci^{1,*}

¹University hospital center IBN SINA, Morocco

*Corresponding author: abdelmouttalibasmae@gmail.com

1. Background: Scalp affected during pemphigus remains little studied in literature. It may be the first or only site of clinical manifestation of the disease.

2. Aims and Objectives: the aim of the study was to help in precocious diagnosis of pemphigus, to look for signs orienting towards a pemphigus vulgaris (PV) or pemphigus superficial (PS) and to identify the predictive signs of an unfavourable prognosis.

3. Methods: Our study included 20 cases of pemphigus with scalp damage (8 PV, 12 PS). Trichoscopy was used to evaluate scalp lesions in these patients

4. Results: The Pemphigus Disease Area Index (PDAI) scalp was $3,33 \pm 2,31$ [1–10]. The most frequently observed trichoscopy features of pemphigus lesions were: extravasations (17/20; 85%). Diffuse scaling and perifollicular scaling occurred more frequently in PS (62,45% and 33%, respectively). Vascular abnormalities were more frequent in PV and were associated with a severe course of disease. It was essentially clustered dotted vessels (37,5% PV).

5. Conclusions: Our study is the first study in the Maghreb concerning the trichoscopy of the scalp pemphigus. Several questions arise about the likely role of traditional cosmetic habits in the frequency of this pathology in the Mediterranean region.

WHEN THE TRICHOSCOPY REVEALS TRACTION ALOPECIA ASSOCIATED TO ALOPECIA AREATA

Wafa Jouini¹, Asmahane Souissi^{1*}, Wiem Sassi¹, Fatimazahra Alaoui¹, Mourad Mokni¹

¹ Department of dermatology, hospital of rabta, tunisia

*dr.asmahanesouissi@gmail.com

1. Background:

Alopecia can cause real distress upon patients considering the aesthetics disgrace associated with this pathology. Despite the reversible course of non scarring alopecia, a dermatologist should be able to identify and treat it.

2. Observation:

A 26 year old patient with no medical history consulted for alopecic patches of the scalp. Clinical examination revealed two irregularly shaped and non scarring alopecic patches with no scales, erythema or atrophy. The diagnosis of alopecia areata was suspected. The first one was localized on the vertex and trichoscopy revealed yellow dots, vellus hair, and pigtail hair. The diagnosis of alopecia areata was made. The second alopecic patch was localized on the frontal line. Trichoscopy showed erythema, perifollicular scales, and hair casts allowing the diagnosis of traction alopecia. In fact, the patient had very long hair pulled in tight bun. She was treated with dermocorticoid for alopecia areata. We also recommended her to change her hairstyle.

3. Key Message:

Non scarring alopecia is a group of hair diseases that can be clinically similar. Trichoscopy can be usefull, especially when different types of alopecia are associated. In our case, it allowed the diagnosis of alopecia areata of the vertex and traction alopecia of the frontal line.

TRICHOSCOPY IN CHILDREN'S ALOPECIA AREATA : SERIES OF 20 CASES

Z. Tazi Saoud,^{1*} F.Z. El Fatoiki¹, H. Skali Dahbi¹, F. Hali¹, S. CHiheb¹

1Ibn Rochd dermatology department, Morocco

*Corresponding author: z.tazisaoud@gmail.com

1. Background: Trichoscopy is a simple technique that increases diagnostic performance in many pathologies of the scalp including alopecia areata.

2. Aims and Objectives: The aim of our study is to report the trichoscopic findings in children's alopecia areata.

3. Methods: We have collected 20 cases of children's alopecia areata followed in a pediatric dermatology consultation at the Ibn Rochd University Hospital in Casablanca. The diagnosis was established on a detailed medical history, a clinical examination and a negative mycological test. In each patient, trichoscopy using DermLite DL4 dermoscope was performed. In every patient, demographic and clinical information including sex, age, and disease duration before treatment start was collected. The severity of hair loss was assessed by the Severity Alopecia TOOL (SALT).

4. Results: The most common trichoscopic findings in children's alopecia areata are empty follicular openings (80%), black dots (68%), upright regrowing hairs (42%), yellow dots and pigtail hairs (37%), short vellus hairs and exclamation mark hairs (32%), white dots and broken hairs (26%), coma hairs (21%), corkscrew hairs and triangular hairs (11%) and white hairs (5%).

5. Conclusions: If the positive diagnosis of an alopecic plaque is obvious, the etiological orientation remains difficult sometimes. Trichoscopy is a quick, non-invasive diagnostic method that reveals signs of alopecia areata in children, helping to initiate early treatment for a better prognosis.

TRICHOSCOPIC FINDINGS IN SYPHILITIC EYEBROW ALOPECIA: REPORT OF 5 CASES

Westphal DC, 1* Lima L, 1 Pontes A, 2 Anzei A; 3 Souza, MNS. 1

1Alfredo da Matta Foundation, Brazil

2Nilton Lins University, Brazil

3University of São Paulo, Brazil

*Corresponding author: dani-westphal@hotmail.com

The main text is given in 11-point and divided into three sections for the abstract of a clinical case:

Background, Observation, Key Message

1. Background: Syphilitic alopecia is an uncommon manifestation of secondary syphilis varying its incidence from 2.9 to 7%. Eyebrow alopecia caused by *T. pallidum* is rare and differential diagnosis with more common diseases, such as alopecia areata and fibrosing frontal alopecia, is necessary. Trichoscopy may assist in this differentiation although, to date, few reports have been published on the trichoscopic findings on eyebrow syphilitic alopecia.

2. Observation: In total, five patients with approximately four-month history of eyebrow alopecia were selected: three male patients and two female patients, with a mean age of 35.8 years. Out of the five cases, only one was classified as symptomatic syphilitic alopecia and all of them presented alopecia in other areas (hair, arms or beard). The main eyebrow dermatoscopic findings were black dots, hypopigmented hairs, tapered hairs and elbow-shaped or angulated hairs with only one sharp angle. The presence of segmented hypopigmented hair and tulip hair in the alopecic areas was also observed in one patient. All patients had a positive treponemal test and VDRL between 1/8 and 1/512. Treatment with benzathine penicillin was performed in all patients with total repilation after an average of four months of treatment.

3. Key Message: The ever-increasing number of syphilis cases in the world may make rare symptoms of this infection more frequent, so dermatologists should be alert and include it as a differential diagnosis in all patients with madarosis. There are still few published studies on dermatoscopic findings in syphilitic alopecia. This is the first report on angulated hairs, tulip hair, tapered hair and broken hair in eyebrow syphilitic alopecia.

DISSECTING CELLULITIS OF THE SCALP, A CASE REPORT.

Gaggino Maria Paz¹, Corball Melisa², Bosio Bonet Magdalena³, Ruiz Lascano Alejandro⁴

¹ MD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina.

² MD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina

³ MD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina

⁴ MD, PhD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina.

Corresponding author: pazgaggino@gmail.com

1. Background:

Dissecting cellulitis (DC) is an inflammatory, chronic, and recurrent disease of the hair follicles. In early stages it may be reversible but it tends to progress to permanent hair loss. We describe a patient with DC of the scalp that had a good response to treatment.

2. Observation:

A 24 year old male patient, presented to our department with 4 months of progressive pruritic alopecic plaques in the scalp. He manifested wearing a helmet many hours for work.

The physical examination revealed multiple round alopecic plaques with swelling, covered by scabs, some pustules mainly in the vertex and occipital region. In addition, he had moderate inflammatory acne.

Trichoscopy showed yellow dots, black dots, short hairs, dystrophic hairs, empty follicular openings, areas without follicular openings, yellow dots with "3D" structure and diffuse erythema with telangiectasias.

With suspicion of primary scarring alopecia, 2 biopsies were performed which reported an intense mononuclear inflammatory infiltrate surrounding atrophic follicular structures. Even though we did not find neutrophils in the biopsy, the clinical and trichoscopy findings were consistent with DC. We initiated doxycycline, topic clobetasol and infiltration with triamcinolone with partial improvement after a month. Thus, we started with Isotretinoin 0.5mg/kg/dia and prednisone 0.5 mg/kg/día in a reduction scheme and shampoo with ketoconazole with excellent response.

3. Key Message:

Clinical and trichoscopic findings of DC may present features common to non-cicatricial and scarring alopecia. Especially in early stages, we must perform differential diagnosis with alopecia areata. Trichoscopy may be helpful in DC to make an early diagnosis, set up proper treatment and stop disease progression.

TRICHOTILLOMANIA TRIGGERED BY A CYST OF THE SCALP: A CASE REPORT

HAMICH Soumaya 1 *, ALAMI Sofia 1, MEZIANE Mariame 1, SENOUCI Karima 1

1Department of Dermatology, Mohamed V University in Rabat, Ibn Sina University Hospital, Morocco

* First author : HAMICH Soumaya

Address: Department of Dermatology, University Hospital Center Ibn Sina, University Mohamed V, 10170 Rabat, Morocco

Phone number : +212661895221

E-mail : hamich.soumaya@gmail.com

Background:

Trichotillomania is a type of traction alopecia caused by compulsive and repetitive hair pulling and plucking. This disorder has been categorized under the rubric of obsessive-compulsive disorder in the most recent update of the DSM-5. It most often affects children aged 9 to 13 years with a predominance of females. Adult onset may be secondary to underlying psychiatric disorders and have a longer evolution. Symptoms include patches of hair of uneven length or hairless areas. Vertex is often affected and several other areas may be involved as well, including the eyebrows, eyelashes, face, arms, legs, and pubic area. Differential diagnosis with alopecia or tinea capitis can be difficult. Trichoscopy provides a great help in diagnosis to avoid invasive diagnostic procedures, especially scalp biopsy. In fact, it reveals patterns resulting from both stretching and splitting of the hair shafts. These breaks can occur at different distances, resulting in uneven dark dots, coiled, hook hair, Y-shaped split ends, tulip hair, V-sign, flame hair and hair powder.

Observation:

We report the case of a 58 year-old woman with a medical history of diabetes on insulin, who presented to our department with a recent alopecia on the vertex. She reported the presence of a cyst on the scalp that drained spontaneously one month ago. On examination we noted a diffuse alopecia of the vertex and frontal area with geometrical borders and varying hair lengths. The hair pull test was negative. On dermoscopy we objected multiple irregular black dots along with hair powder, coiled hairs, short broken hairs, flame hairs and regrowing hair of multiple length. There wasn't any exclamation mark hairs or yellow dots. The remaining scalp areas were normal and the rest of the clinical examination was free of any abnormality.

The patient denied intensive pulling of the hair, and seemed very anxious. A biological assessment was requested but the patient was lost to follow-up.

Key message:

Even if the patient does not admit it, trichotillomania should be considered in the presence of a particular context of unexplained recent alopecia and suggestive dermoscopic signs.

SCALP SARCOIDOSIS: CLINICAL, TRICHOSCOPIC AND PATHOLOGIC CORRELATION

B.Karrakchou1*, S.Hamich1, A.Fliti1, I.Boubnane1, K.Znati2, N.Ismaili1, L.Benzekri1, K.Senouci1, M.Meziane1

1 Dermatology and Venereology Department, Ibn Sina Hospital, Mohammed V University, Rabat, Morocco

2 Pathology Department, Ibn Sina Hospital, Mohammed V University, Rabat, Morocco

*Corresponding author: karrakchou.basma@gmail.com

1. Background:

Scalp sarcoidosis is a rare condition mostly presenting as a scarring alopecia areata. Herein we report a case of a total scarring alopecia due to sarcoidosis and we emphasize its trichoscopic features and pathologic correlation.

2. Observation:

A 51year-old woman with a history of vitiligo, and squamous cell carcinoma of the lower lip, presented with a total alopecia evolving since 9years, starting with an erythematous painless and non-itching condition of the whole scalp, progressively evolving towards total alopecia. Clinical examination showed a reddish and yellowish aspect of the scalp with several ulcerations covered with hemorrhagic crusts and scleroderma-like scalp atrophy. Trichoscopy found multiple branching vessels over yellowish-orange globular structures. Scar-like depigmented areas were seen. Histological examination revealed multiple epithelioid cell granulomas without central necrosis, associated with a sparse dermic and peri-adnexal lymphocytic infiltrate, and without mucinosis. Immunohistochemistry eliminated a cutaneous lymphoma. Oral prednisone was started with a healing of scalp lesions but without hair regrow.

3. Key Message:

Scalp sarcoidosis is rare and polymorphous, its dermatoscopic patterns reflect the underlying histological structures:

- the yellowish-orange globular structures correspond to round, well-formed granulomas without central necrosis in the superficial dermis. They may represent a clue to sarcoidosis diagnosis
- the branching vessels are vasodilatations in the papillary dermis
- the scarring alopecia is due to follicular destruction by granulomas affecting the deep dermis and hypodermis.
- dystrophic hairs can also be seen and probably correlate with the disease activity.

AUTOLOGOUS MICROGRAFTING TECHNOLOGY IN COMBINATION WITH FUE HAIR TRANSPLANT

T. Oguzoglu1*

1 Tayfun Oguzoglu MD, Fellow designation of the International Society of Hair Restoration Surgery, American Board of Hair Restoration Surgery, DrT Hair Transplant, Turkey.

*Corresponding author: drt@drthair.com

Background:

There have been some crucial changes in hair transplant operations after the transition to FUE from the FUT method. The most important one is the operation duration. In FUT operations, follicles remain outside of the body for around 2-3 hours, whereas in FUE operations, this period is longer than 4 hours. As hair surgeons, we tried to create innovations to tackle these problems. We tried to advance our technique to shorten the time that hair follicles remain outside of the body. Furthermore, we tried to find and use the holding solutions that are most compatible with the body's composition.

Aims and Objectives:

We aim to shorten the duration of the FUE operations. Furthermore, we project to work on a holding solution that is more compatible with the body component and cheaper.

Methods:

We contain hair grafts in AMT solutions that are extracted from the patient's own hair grafts. In this way, we aim to avoid graft reperfusion or dryness before the implantation. Our goal is to increase regrowth rates to a maximum and reach satisfying results. On the other hand, we also aspire to inject a portion of the AMT solution into the recipient area to increase blood circulation and revascularization of the zone.

Results:

The application of the AMT solution to the FUE operations decreases the Effluvium rates after the operation. Furthermore, it helps the implanted hair grafts to reach the Anagen phase earlier. In this sense, it is possible to reach satisfying results in 8 months.

Conclusion:

The usage of the holding solution that is autologous and most similar to the body component plays an essential role in FUE operations, improving final aesthetic and physiological results.

Dissecting cellulitis of the scalp mimicking kerion in a patient who returned from Wuhan.

Introduction

Dissecting cellulitis thought to be typical for black males is not an uncommon disease in Russia. An early detection could be challenging for this condition but is associated with a better prognosis and maintenance of an aesthetic appearance. Although biopsy remains a gold standard to confirm the diagnosis in cicatricial alopecias, in a number of cases, especially in early lesions, it could be unrepresentative. The role of additional diagnostic methods is difficult to overestimate in these situations.

Material and Methods

We present a 40-year-old man with a pruritic rash on his scalp which first appeared 3 years ago right after returning from a business trip to Wuhan in summer 2018. The same year he consulted to a dermatologist because of the rash spreading and outbreak of new foci but all localized on the scalp. Over the course of the illness (3 years) he changed 12 dermatologists and was made 6 different diagnoses: tinea capitis, seborrheic dermatitis, scalp arsesites, pyoderma, pityriasis rubra pilaris. Previous treatment with topical and systemic antimycotics, short-course antibiotics, metronidazole, shampoos with tar and pyrithione zinc showed no effect. The disease was persistent and progressive with no long-lasting remission in 3 years, the rash persisted in the same places appearing as tender itchy nodules mostly localised on the vertex with broken 2-3 mm hair seen as patchy hair loss, but not permanent (Fig. 1, 2, 3).

Improvement according to the patient occurred 2 times but lasted no longer than 3 weeks: after insolation during a trip to the sea and after combination therapy with levofloxacin, azithromycin and dexamethasone due to COVID-19 infection. The patient also used antiseptic green dye and pure ichthyol that made the itching stop.

The last 2 months adhering to endocrinologist's recommendations the patient has been losing weight from 119 kg to 113 kg (first-degree obesity) which also made a good influence on the pruritis and painfulness of the lesions. His daughter (14 years) has a similar rash with an onset from November 2020. The patient has no personal history of acne or other follicular occlusion syndrome diseases.

Potassium hydroxide preparation showed no fungal spores or hyphae (Fig. 4). The bacterial culture is sterile.

Trichoscopy shows broken 2-3 mm hair, hair tufting (5-8 from a single ostium), broom hair, black dots and three-dimensional yellow dots over dystrophic hair shafts (Fig. 5, 6).

Biopsy demonstrates epidermis with hyperkeratosis. Sclerosis, keratosis, thickening of the epithelial layer around the hair follicles. No classical features of dense perifollicular neutrophil-predominant, mixed-cell inflammatory infiltrate are seen. Histology does not contradict with the diagnosis of dissecting cellulitis of the scalp (Fig. 7).

Results

Our patient's condition, initially misdiagnosed and treated as 6 different diseases, was appropriately diagnosed as dissecting cellulitis of the scalp based on the clinical findings, histological, trichoscopic examination and negative potassium hydroxide preparation. One of the key roles in the diagnosis belonged to the trichoscopic picture.

Discussion

Patchy hair loss and broken 2-3 mm hair are commonly misdiagnosed as tinea capitis. This case demonstrates the need for complete and comprehensive survey especially in patients who do not respond to standard therapy. Early treatment of cicatricial alopecias helps to avoid potentially devastating longterm complications.

HAIR DISORDERS

PATTERNS OF SENSITIZATION TO FOOD AND INHALED ALLERGENS AMONG PATIENTS WITH SCALP PSORIASIS

Anna A. Barilo^{1,*}, Svetlana V. Smirnova¹

¹ Scientific Research Institute of Medical Problems of the North – a separate division of the Federal Research Center «Krasnoyarsk Science Center» of the Siberian Branch of the Russian Academy of Sciences, Krasnoyarsk

*Corresponding author: anntomsk@yandex.ru

1. Background: Scalp psoriasis is one of the clinical variants of psoriasis. Scalp psoriasis impair quality of life regardless of the severity of psoriasis on other affected body regions.

2. Aims and Objectives: To determine the prevalence of hypersensitivity reactions to food and inhaled allergens in patients with scalp psoriasis.

3. Methods: A total of 14 patients with scalp psoriasis (mean age $32,0 \pm 4,0$ years) from Krasnoyarsk Territory (Eastern Siberia) were skin prick tested with food and inhaled allergens. The average duration of scalp psoriasis was $5,0 \pm 2,7$ years. The median patient's Psoriasis Area and Severity Index (PASI) was $10,2 \pm 3,5$. 42,9% patients had itch on the scalp. Patients had burdened allergic history in 50,0% cases.

4. Results: Skin testing revealed hypersensitivity to food allergens in 92,9% patients, and sensitization was weakly positive in 57,0% cases. The most significant food allergen was egg and cow's milk – 71,4%. Sensitization to cereals was noted in 57,1% cases. The prevalence of monovalent sensitization to food allergens was noted in 15,4% cases, bivalent sensitization – 53,8%, polyvalent sensitization to cow's milk, eggs, cereals – 30,8%. Sensitization to pollen allergens was noted in 55,8% cases, to fungal allergens – 43,8%, house dust mite sensitization – 68,8%.

5. Conclusions: Thus, we can conclude that patients with scalp psoriasis have high frequency of positive reactions to food and inhaled allergens.

FRONTAL FIBROSING ALOPECIA: MOROCCAN STUDY FROM THE UNIVERSITY HOSPITAL OF RABAT

Authors: S. Maouni*; M. Meziane; K. Senouci

Author's affiliation: Department of dermatology, Ibn Sina University Hospital of Rabat. Morocco

*Corresponding author: Safae Maouni

maouni.safae88@gmail.com

1. Background:

Frontal Fibrosing alopecia (FFA) is a particular form of lichen planopilaris. It is a lymphocytic primary cicatricial alopecia, located on the frontal and temporal areas associated or not with an eyebrow alopecia and facial papules.

2. Aims and Objectives: To determine epidemioclinical, dermoscopic, histological, therapeutic and evolutionary characteristics of the FFA in Moroccan population.

3. Methods: This is a prospective descriptive study, involving 31 patients with confirmed FFA and followed up at the department of dermatology in University Hospital of Rabat/ Morocco, over a period of 4 years from December 2015 to December 2019.

4. Results:

All cases was women. Median age was 55 years, 36.6% in menopause and 63.3% in pre- menopause. 16.6 % had a metabolic syndrome, 26.6% autoimmune diseases, 6.66 % a mycosis fungoide. Similar familial cases in 20%. 46.6% had lichen pigmentogen, 6.6% lichen planopilaris, and 3.3% a Graham- Little- Lassueur syndrome. Topical steroids with topical minoxidil were prescribed in all patients. 41.9% of cases received doxycycline, 29% had oral retinoids. Evolution was favorable in 87.5% with 6 months of median follow- up.

5. Conclusions:

The treatment of FFA remains non- consensual, our patients evolved well under cyclines which may suggest the reclassification of this molecule in the treatment of this pathology especially for the African population. Retinoids worked better on the follicular papules with fast and satisfactory results.

TRICHOSCOPIC EVALUATION OF FRONTAL HAIRLINE RECESSION IN EGYPTIAN FEMALE PATIENTS

Dr. Marwa Said,¹ Prof. Dr. Sawsan Khalifa El-Sayed², Noha Diyaa Eldeen Elkhoully³

¹Lecturer of dermatology and venereology, Faculty of medicine (for girls)- Al-Azhar University Cairo- Egypt.

²professor of dermatology and venereology, Faculty of medicine (for girls)- Al-Azhar University Cairo- Egypt.

³ Resident of dermatology and venereology, Faculty of medicine (for girls)- Al-Azhar University Cairo- Egypt.

*Corresponding author: Email: mderm2014@gmail.com

1. Background: (11-point boldface) Frontal hairline is the most characteristic feature especially in women, affecting the psychological state, either resulting from androgenetic or non-androgenetic origin.

2. Aims and Objectives: The aim of the present study was to evaluate the causes of the frontal hairline recession in Egyptian female patients using trichoscopy and to detect the prevalence of each of those causes in Egyptian females.

3. Methods: This study was performed on 200 Egyptian female patients aged between 15- 65 years complained of frontal hairline recession, derived from Al- Zahraa University hospital from November 2017 to April 2019. full history taking, dermatological examination, photographs trichoscopic examination and statistical evaluation.

4. Results: The most causes of the frontal hairline recession in Egyptian female patients was androgenetic alopecia AGA (50%) Most of the patients were of old age (58%). The high statistically significant trichoscopic findings in androgenetic alopecia were yellow dots, peripilar sign, hair diameter diversity, single hair pilosebaceous unit (45.0%, 61.0%, 100.0%, and 96.0%) respectively. On the other hand, peri-follicular scaling, absence of hair follicles and lonely hair revealed a high statistically significant presentation (88.9%, 100.0%, and 22.2%) respectively with frontal fibrosing alopecia. vellus hair (100.0%) and perifollicular casts (91.8%) with Tractional alopecia. Finally, hair broken at different levels (100%), black powder (88.9%), black dots (100.0%), hook hairs(11.1%), i hair (16.7%), v. sign (44.4%), flame hairs(33.3%), coiled hair(5.6%) and burnt match stick sign(5.6%) showed a high statistically significance presentation with Trichotillomania

5. Conclusions: The present study supports the trichoscopic criteria for the diagnosis of causes of frontal hairline recession.

COEXISTENCE OF ALOPECIA AREATA AND FRONTAL FIBROSING ALOPECIA

M.C. Annunziata*, P. Nappa, M. Cantelli, A. Patrì, M. Vastarella, G. Fabbrocini

Departement of Clinical Medicine and Surgery – section of Dermatology. University of Naples Federico II – Naples (Italy)

*Corresponding author: marica.annunziata@hotmail.it

1. Background:

Alopecia areata (AA) is a type of non-scratching alopecia that has well-circumscribed patches of hair loss involving the scalp and / or beard with normal-looking alopecic skin. Frontal fibrous alopecia (FFA) is a type of cicatricial alopecia that presents itself as a symmetrical and frontotemporal regression of the hairline and can involve the eyebrows and eyelashes with atrophic and hypopigmented alopecic skin.

2. Observation:

We present a case of a 54-year-old patient with a history of AA who subsequently developed FFA. This sequence of pathologies offers the opportunity to discuss the etiology that could contribute to this case. According to biopsy reports, our patient had lymphocyte-mediated scar alopecia with mild perivascular and peripollicular lymphocyte infiltrates concentrated around the area of the hair swelling, characteristic of the FFA. The patient had patchy AA, affecting 30% of the scalp that responded to intralesional corticosteroids and topical steroid treatment before FFA developed.

3. Key Message:

We can hypothesize, as also some authors in the past, that the pathogenesis of AA and FFA is similar since both diseases suffer a loss of the immune privilege (IP) in the hair follicle, which leads to subsequent inflammation mediated by T cells. The main difference between these two diseases is that inflammation mediated by CD8 + T cells in the FFA occurs on the bulge, which contains crucial stem cells, as opposed to the AA bulb. It is possible that patients with AA, who have lost IP on the bulb, are prone to loss of IP on the bulge again later in life through the same mechanism.

Many patients with AA develop the disease at a young age, while FFA is more commonly observed in postmenopausal women. Both diseases therefore occur during periods of change in hormone levels that can cause dysregulation of the immune system, with AA related to puberty and FFA related to menopause. A further relationship between FFA and AA pathogenesis is related to melanocytes. Histological analysis showed that lower melanocyte counts in patients with FFA were associated with clinical observations of skin hypopigmentation. Destruction of melanocytes could release peptides derived from melanocytes that trigger CD8 + cells. Melanocyte-derived autoantigens can play a role in the activation of CD8 + T cells that cause FFA and AA.

ORAL MINOXIDIL FOR THE TREATMENT OF CHEMOTHERAPY INDUCED ALOPECIA

M.C. Annunziata*, P. Nappa, M. Cantelli, A. Patri, D. Fattore, M. Vastarella, G. Fabbrocini

Departement of Clinical Medicine and Surgery – section of Dermatology. University of Naples Federico II – Naples (Italy)

*Corresponding author: marica.annunziata@hotmail.it

1. Background:

Chemotherapy induced alopecia (CIA) can seriously affect the quality of life of patients. CIA occurs in about 65% of patients undergoing cancer treatment. Prevalence and severity depend on which chemotherapeutic agent is used. Alopecia occurs most often with the use of anti-microtubule agents (>80%), followed by topoisomerase inhibitors (60%-100%), alkylating agents (>60%), and antimetabolites (10%-50%). A higher incidence is also reported with poly chemotherapy compared to monotherapy. Currently, the main preventive and treatment options include topical minoxidil and cold caps. Only few data are currently available about the use of oral minoxidil (OM) in these patients.

2. Aims and Objectives:

In this study, we would like to share our results using a low dose of OM (1 mg/d) as monotherapy in the treatment of 15 female patients with CIA. Patients included had at least 24 weeks of follow-up and records of clinical and trichoscopic images. Patients with permanent CIA or with recent (<6 months) or concomitant use of other therapies for CIA were not included.

3. Methods:

Clinical and trichoscopic images from the frontal scalp (midline) and vertex was carried out by using FotoFinder TrichoLAB Snap software (TrichoLAB, BadBirnbach, Germany) with Hair-to-Hair Matching technology. Parameters examined were total hair density, density of terminal hair, new hairs/cm², new terminal hairs/cm² and also the trichoscopic occurrence of some specific mark (circle hair, black dots, exclamation marks, pseudomoniletrix). The sample included 15 patients with a mean age of 56.9 years.

4. Results:

Improvement or stabilization after 24 weeks was observed in a percentage of individual patients for all parameters analyzed. Adverse effects reported were hair shedding in 5 and body hypertrichosis in 8 patients. 1 patient discontinued the treatment for the worsening of her oncological condition.

5. Conclusions:

The proposed dosage of OM is effective and it can probably become a therapeutic choice for the treatment of CIA. Of course, it is necessary to increase the number of the sample to confirm our data.

ORAL MINOXIDIL IN ANDROGENETIC ALOPECIA: OUR EXPERIENCE

M.C. Annunziata*, P. Nappa, M. Cantelli, A. Patri, M. Vastarella, G. Fabbrocini

Departement of Clinical Medicine and Surgery – section of Dermatology. University of Naples Federico II – Naples (Italy)

*Corresponding author: marica.annunziata@hotmail.it

1. Background:

Androgenetic alopecia (AGA) is the most common type of alopecia in men and can have a negative effect on the quality of life. Oral finasteride and topical minoxidil are currently the only real drugs approved for the treatment of male AGA. Some recent publications report successful use of oral minoxidil (OM) (2.5-5 mg / day) in men with AGA. The optimal dose of OM has yet to be outlined. Recently, some authors have reported positive results with a much lower dose of OM in women (OM 0.25 mg).

2. Aims and Objectives:

In this study, we would like to share our results using a low-medium dose of OM (2.5 mg/d) as monotherapy in the treatment of 30 male patients with AGA. Patients included had at least 24 weeks of follow-up and records of clinical and trichoscopic images. Patients with recent (<6 months) or concomitant use of other therapies for AGA were not included.

3. Methods:

Trichoscopic images from the frontal scalp (midline) and vertex was carried out by using FotoFinder TrichoLAB Snap software (TrichoLAB, BadBirnbach, Germany) with Hair-to-Hair Matching technology. Parameters examined were total hair density, density of terminal hair, new hairs/cm², and new terminal hairs/cm². The sample included 30 patients with a mean age of 38.8 years. 12 had mild-moderate AGA (II-III vertex by the Hamilton-Norwood scale) and 18 severe AGA (IV-VI).

4. Results:

Improvement or stabilization after 24 weeks was observed in a percentage of individual patients for all parameters analyzed. Adverse effects reported were hair shedding in 6 and body hypertrichosis in 8 patients. 18 patients also reported perception of increased hair density in the beard. No patient discontinued treatment.

5. Conclusions:

The proposed dosage of OM is probably a good choice for the treatment of AGA and, primarily, it has the right balance between efficacy and side effects.

DERMOSCOPY AND FUNGAL FLUORESCENCE STAINING DETECT INFANT KERIONS WITH SUCCESSFUL TREATMENT OF ITRACONAZOLE

1st Bin Yin1*, 2nd Lixin Fu1, 3rd Chonghui Li1 and 4thWenju Wang1

1Department of Dermatology, Chengdu Second People's Hospital, Chengdu, China

* Corresponding Author: dr.yb@qq.com

1. Background :

Tinea capitis is an infection of scalp hair follicles and the surrounding skin, caused by dermatophyte fungi, usually species in the genera *Microsporum* and *Trichophyton*. Although less frequent than children, tinea capitis has also been seen in infants and toddlers, even in neonates. An accurate diagnosis remains a vital component of management. Clinicians unfamiliar with this condition often misdiagnose tinea capitis, especially inflammatory variants such as kerions, leading to delays in diagnosis and inappropriate management. These two cases were aimed to show infant tinea capitis with accurate diagnosis and successful treatment.

2. Observation :

Case 1 was a 54-day-old girl which presented to our clinic with multiple abscesses with associated alopecia on her scalp for 11 days. Cutaneous examination showed tenderness on palpation and the abscesses studded with scaly erythema and pustules. Her family was engaged in farming, raising more than a thousand rabbits. On dermoscopic examination broken and dystrophic hairs with yellow-white sheath-like scales and scattered crust were observed. Culture of secretion from the abscess was negative for bacteria. Case 2 was an 8-month-old boy who was presented with a 7-month history of a circular alopecia with diffuse scaling on his scalp. Six months prior to the current observations, he was diagnosed with fungal infection and treated with topical anti-fungi agents (specific information unavailable), but his condition did not improve. Accumulated scales around hair roots, black dots, cigarette-ash-shaped hairs and barcode-like hairs with horizontal white bands were observed by dermoscopy.

Mycological direct examination with fungal fluorescence staining of the two cases both showed high numbers of ectothrix spores and endothrix hyphae of the hair. Fungal culture inoculated from the samples of the lesions and sequence analysis were performed. On the basis of these morphologic features and sequence data, the isolated strains were identified as *Trichophyton mentagrophytes* and *Arthroderma otae* (teleomorph of *Microsporum canis*) respectively.

The two patients were started on oral therapy with itraconazole suspension (5 mg/kg/day), in addition to topical use of naftifine -ketoconazole cream daily combined with ketoconazole shampoo three times weekly. Clinical, dermoscopic and mycological examinations were conducted every 2 weeks. After 4 weeks of treatment with itraconazole, the inflammatory masses and scaling gradually subsided and culture was negative. The dermoscopic observation after complete treatment showed the dystrophic hairs and cigarette-ash-shaped hairs subsided. The oral itraconazole and the administration of topical therapy were stopped when the scalp scaling was disappeared and hair regrowth was clinically evident. The patients were cured clinically and mycologically following treatment with no reoccurrence observed after 3 months of follow-up.

Key Message:

Dermoscopy is a fast, noninvasive and inexpensive method that has been described with the specific features of tinea capitis such as comma hairs, corkscrew hairs, zigzag hairs, barcode-like hairs and cigarette-ash-shaped hairs. These two cases highlight the importance of using both dermoscopy and fungal fluorescence staining, an effective and precise method, NOT ONLY for facilitating the diagnosis of hair shaft infection caused by dermatophytes BUT ALSO Monitoring the treatment effects.

A CASE OF ALOPECIA AREATA IN PATIENT WITH SEASONAL ALLERGIC RHINITIS

Anna A. Barilo^{1,*}, Svetlana V. Smirnova¹

¹ Scientific Research Institute of Medical Problems of the North – a separate division of the Federal Research Center «Krasnoyarsk Science Center» of the Siberian Branch of the Russian Academy of Sciences, Krasnoyarsk, Russian Federation

*Corresponding author: anntomsk@yandex.ru

1. Background: Alopecia areata (AA) is a common and complex T-cell-mediated disease, where an autoimmune response directed at the hair follicles is triggered that results in hair loss. The autoimmune process is mediated by CD4⁺- and CD8⁺-T cells, however, the specific autoantigens are still being studied. Recent studies have identified the association of AA with atopic conditions, such as allergic rhinitis and atopic dermatitis.

2. Observation: A 8-year-old child (girl) presented with non-scarring alopecia with a history of seasonal allergic rhinitis since 3 years. The lesion had an evolution of 1 month in peak date of birch pollen concentration and that it was asymptomatic. This year she did not have symptoms of pollinosis. Trichoscopic findings were compatible with AA. She had been treated for AA with a topical corticosteroid for the past 6 month, which did not result in any significant hair regrowth. Laboratory tests revealed elevated concentration of eosinophil (8,7%), serum levels of IgE (662 IU/ml) and normal thyroid function. The top five most sensitized allergens (skin prick tests) were birch pollen, carrot, apple, pear, egg white, wheat. She received allergens elimination diet, topical calcineurin inhibitors. In 2 months the patient showed significant hair regrowth.

3. Key Message: We concluded that alopecia areata can be a clinical manifestation of food allergy where a cellular inflammatory response is triggered against hair follicles and associates with atopy.

TREATMENT OF SEVERE ALOPECIA AREATA WITH TOFACITINIB: A RETROSPECTIVE STUDY

1st Sherman Chu, BS,^{1,2} Wilma F. Bergfeld, MD²

¹Department of Dermatology, Case Western Reserve University, Cleveland, OH, USA

²Department of Dermatology, Cleveland Clinic Foundation, Cleveland, OH, USA

*Sherman Chu: sxc1407@case.edu

1. Background: Tofacitinib citrate is a Janus kinase 1/3 inhibitor approved for the treatment of rheumatoid arthritis, but has shown effectiveness in the treatment of severe alopecia areata (AA).

2. Aims and Objectives: We sought to evaluate the safety and efficacy of Tofacitinib citrate, a Janus kinase 1/3 inhibitor, in patients being treated for confirmed AA using a standardized, systemic treatment regimen.

3. Methods: Investigators searched Cleveland Clinic records for patients with AA treated with tofacitinib. Treatment with tofacitinib citrate was initiated at 5mg twice daily. The daily dosage increased, as allowed by insurance, by 5mg per month until first signs of regrowth was noted and medication was continued at that dosage. The validated Severity of Alopecia Tool (SALT) was used to measure hair loss; the higher the score, the greater amount of hair loss.

4. Results: We identified 23 patients who were or are being treated. Hair regrowth was seen in the majority of patients, ranging from 5-100%. Treatment duration ranged from 2-58 months in our patients. Full regrowth was seen in patients ranging from a dosage of 10-20mg/day and a treatment duration ranging from 2-57 months. Over 90% of patients treated for over 12 months had hair regrowth.

5. Conclusions: Oral tofacitinib is a successful therapy for AA, but efficacy varies widely across patients. Future randomized, controlled trials involving a larger sample population are needed to evaluate the efficacy of the drug.

PRIMARY SCARRING ALOPECIA FOLLOWING SCALP SURGERY: REPORT OF TWO CASES

I.Doche*, I.Rosan, N.Valente, M.C.Rivitti-Machado

Department of Dermatology, Hospital das Clínicas, University of São Paulo Medical School, Brazil

*Corresponding author: isabelladoche@gmail.com

1.Background:

We report two unique cases of a previous scalp tumor excision followed by typical lichen planopilaris (LPP) and folliculitis decalvans (FD) lesions.

2.Observation:

CASE 1: Male, Caucasian, 19 years old, with alopecia, scalp inflammation and local pruritus for one year, suggestive of LPP. He referred a previous history of neurofibroma excision due to neurofibromatosis type 1 in the same scalp location 6 months before. No post-operative complications occurred. CASE 2: Woman, African-american, 44 years old, with patchy alopecia associated with purulent discharge and pain over the vertex for the last 6 months. She reported a lipoma excision in the corresponding area three years before the onset of the lesion. Trichoscopy of both lesions showed typical features of LPP and FD. Scalp biopsies of the affected areas confirmed both diagnoses.

3.Key message:

There are a few reports in the literature of primary scarring alopecia following scalp surgery and most of them are related to hair transplantation surgery. The pathomechanism of tissue damage causing primary scarring alopecias is still unclear. In our reports, the scalp surgery could have been coincidental or an epiphenomenon in the development of these types of alopecia. However, the appearance of typical lesions over the exact sites of the surgical procedures highlights a possible link between skin injury and primary scarring alopecias in susceptible individuals.

SCALP DISCOID LUPUS ERYTHEMATOSUS EVOKED BY ALOPECIA AREATA: A POSSIBLE ROLE FOR MYXOVIRUS RESISTANCE PROTEIN A ACTIVATION? – CASE REPORT

M. Rebeis^{1,*}, I.Doche², R.Romiti³, N.Valente⁴, M.C.Rivitti-Machado⁵, M.Hordinsky⁶

¹⁻⁵Department of Dermatology, Hospital das Clínicas, University of São Paulo Medical School, Brazil

⁶ Department of Dermatology, University of Minnesota Medical School, United States

*Corresponding author: marina.rebeis@gmail.com

1.Background:

We report a case of discoid lupus erythematosus (DLE) lesions developed over the same areas of alopecia areata (AA) in the scalp and speculate the possible role of myxovirus resistance protein A (MxA) in the pathogenesis of both diseases.

2.Observation:

Woman, 25 yo, skin type V, presented with a 6-month history of alopecia areata followed by typical DLE lesions over the same scalp areas. She had a past history of SLE and DLE over her face. Current medications included prednisone (5mg/day) and hydroxychloroquine (400mg/day). Trichoscopy showed features of both scarring and nonscarring diseases. Scalp biopsies and direct immunofluorescence (DIF) were performed in both areas. After a six-month period of topical and intralesional steroids, complete hair regrowth over AA areas could be noted, while scalp with areas of scarring remained unaffected.

3.Key message:

Immunologic studies of AA and DLE alopecic lesions have shown an increase in intracellular MxA, a GTPase encoded by an interferon (IFN)-activated human gene and a key component of the innate immune system inhibiting the multiplication of several viruses. MxA has been found to be increased in both diseases, suggesting a link between IFN 1 and the occasional development of AA-like hair loss in LE patients. Further investigations may help delineate the details of this phenomenon in patients with SLE and understand on why such colocalization of AA and DLE is not observed more often.

PRESSURE-INDUCED ALOPECIA: PRESENCE OF THIN HAIRS AS A TRICHOSCOPIC CLUE FOR THE DIAGNOSIS

Daniel Fernandes Melo a, b, Violeta Duarte Tortelly a, b, Beatriz Serafim Ghedin a, Caren dos Santos Lima c, Thais Ura Garcia a, Taynara de Mattos Barreto a

a Department of Dermatology, Marcílio Dias Hospital, Rio de Janeiro, Brazil;

b Department of Dermatology, Pedro Ernesto University Hospital, State University of Rio de Janeiro, Rio de Janeiro, Brazil;

c Department of Dermatology, State University of Pará, Belém, Brazil

*Corresponding author: E-mail adress

Daniel Fernandes Melo danielfernandesmelo@yahoo.com.br

1. Background:

Pressure-induced alopecia (PA) is a term used to describe a group of scarring and nonscarring alopecias that usually occur following prolonged immobilization.

Trichoscopic findings described in the literature are scarce, nonspecific, and include black dots, broken. hairs, circle hairs, erythema, and ulcerations.

Hair loss happens because of tissue ischemia caused by prolonged pressure on the scalp, which results in compression of the vessels surrounding hair follicles with the cessation of their activity.

2. Observation:

We report 3 cases of PA in which vellus hairs and residual thin hairs were preserved. Since vellus and thin hair bulbs are located more superficially than the terminal ones, they will experience less injury and hypoxia, leading to preservation of those hair shafts.

A possible reason would be that the pressure distribution occurs in a conical shape, similar to what happens in pressure ulcers, so it exposes deeper tissues to a higher pressure, leading these areas to suffer more from ischemia.

We suggest that the presence of thin and vellus hairs should be considered as a trichoscopic clue for PA diagnosis in doubtful cases.

3. Key Message:

We reported 3 cases of PA in which clinical and trichoscopic features led to a correct diagnosis. Many vellus hairs and residual thin hairs were observed in all cases, and their presence may be explained by their lower metabolic rates and/or the more superficial insertion of their bulbs. These trichoscopic features have not yet been reported in the literature. Although more studies with a larger number of patients are necessary to confirm our observations, we suggest that they should be considered as trichoscopic clues for PA diagnosis in doubtful cases.

EROSIVE PUSTULAR DERMATOSIS OF THE SCALP INDUCED BY GEFITINIB

G. Nazzaro, P. Bortoluzzi, S. Giacalone*

1 Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico-Milano, Italy

2Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico-Milano, Italy

*Corresponding author: gianluca.nazzaro@gmail.com

Background: Erosive pustular dermatosis of the scalp is a uncommon disease mainly affecting elderly white men with a prolonged sun exposure. It is characterized by slow progression, sterile pustules, and scarring alopecia. Gefitinib is an epidermal growth factor receptor tyrosine kinase inhibitor. Blocking the signal mediated by epidermal growth factor receptor leads to the blockade on the hair growth cycle with associated changes in structure and inflammation process additionally activated within the hair follicle.

Observation: We report a rare case of erosive pustular dermatosis of the scalp during treatment with gefitinib in a patient affected by non small cell lung cancer and multiple metastases. In literature there are only two others similar cases described in a comprehensive review by Toda et al. It is of interest that these two patients underwent previously radiotherapy, while the patient of our case has been treated for actinic keratosis.

Key Message: We consider erosive pustular dermatosis of the scalp as a delayed wound healing because of skin atrophy and chronic inflammation. Skin atrophy was probably due to radiotherapy in the previously described patient and to actinic damage in our patient. Chronic inflammation could be related to the role of epidermal growth factor in cell differentiation and apoptosis.

SUSPECTED RECURRENT ALOPECIA AREATA INCOGNITO WITH ACUTE RESPIRATORY TRACT INFECTIONS IN A HEALTHY CHILD

Valerie Pui Yoong Ho^{1,*}, Priya Bishnoi¹, Mark Jean Aan Koh¹ and Emily Yiping Gan¹

¹Dermatology Service, KK Women's and Children's Hospital, Singapore

*Corresponding author: valerie.ho.p.y@singhealth.com.sg

1. Background:

Alopecia areata incognito (AAI) is a distinct subtype of alopecia areata (AA) that has acute and diffuse shedding of telogen hairs and more than 50% of scalp hair loss. Clinically it can be misdiagnosed as telogen effluvium (TE) or androgenic alopecia but has dermoscopic and histopathology findings of AA. It tends to affect female adults and has never been reported in children. We report a suspected case of AAI in a child.

2. Observation:

A previously well 7-year old girl with no family history of autoimmune disease presented with 2 episodes of acute severe diffuse hair loss during upper respiratory tract illnesses (URIs). Approximately 70% of her scalp hair was lost over 1-2 weeks with spontaneous regrowth over the next 3 months. During the URIs, only symptomatic medications were taken. Examination 1 month after the 2nd episode showed diffuse hair loss and significantly reduced hair density with parts of the scalp visible. Eyebrows were intact and there was a positive hair pull test. Hair mount sent showed increased telogen hairs. She returned 1 year later with 2 more similar episodes.

Scalp biopsy was declined.

3. Key Message:

This child was initially diagnosed with TE based on the clinical history and hair mount findings. However, the acuity and severity of hair loss and regrowth is more in keeping with AAI. We recommend prompt visits for dermoscopic examination for future acute episodes, and consideration of scalp biopsy. Prognosis is good regardless, with spontaneous regrowth.

AZATHIOPRINE INDUCED ANAGEN EFFLUVIUM- RARE CASE REPORT

1st A. Deep Jarsania^{1*}, 2nd B. Rachita Dhurat¹, 3rd C. Aseem Sharma¹, 4th D.

Kiran Chahal¹

¹ Department of Dermatology, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, Maharashtra, India.

*Corresponding author: deepjarsania@gmail.com

1. Background:

Anagen effluvium is the abrupt loss of hair that are in their growing phase (anagen) associated with chemotherapy and radiation to the head and neck. Apart from these, it can also be caused by severe protein energy malnutrition, pemphigus vulgaris, alopecia areata etc. Anagen effluvium occurs due to an agent or event that drastically reduces the metabolic activity of the matrix cells of the hair follicle. At any given time more than 80% of scalp hair is in the anagen phase of the hair cycle. Hence the resulting hair loss is abrupt and extensive. Fortunately, the quiescent bulge stem cells that re-initiate follicle growth are spared making the phenomenon completely reversible with regrowth usually apparent within 1–3 months.

2. Observation:

Case series- Three patients who came to a tertiary care hospital for treatment of unstable vitiligo vulgaris.

Our first patient is a 30 year old female with unstable vitiligo vulgaris who was started on Tab azathioprine 50mg once daily dose. Within a few days patient developed diffuse extensive sudden hair loss of the entire scalp. Patient also developed leukocytopenia along with the hair loss.

Our second case is a 12 year old female who was also started on tab azathioprine 50mg OD for unstable vitiligo vulgaris. Patient was already on Tab Betnesol forte 3mg twice weekly dosage. This patient developed sudden diffuse hair loss over frontal and vertex area of scalp after a single dose of azathioprine within 5 days of taking the medication. Hair pull test was strongly positive.

Third case is a 12 year old female a known case of vitiligo vulgaris since 6-7 months, who was on betnesol pulse for 2 weeks and started on azathioprine patient took medicine for a day or two and stopped on her own, she was again started on azathioprine 50mg od however in 2 days she developed excessive shedding of hair, involving all areas of scalp. Hair pull test was strongly positive.

All the patients started showing regrowth of hair after 3-4 months of stopping azathioprine.

Trichoscopy shows multiple black dots with few tulip hairs.

3. Key Message:

This case series is an attempt to highlight a rare but extremely distressing side effect of Azathioprine which is a commonly used immunosuppressive treatment modality in various dermatological diseases.

A CASE OF ACQUIRED TRICHORRHEXIS NODOSA

1st Sradda Naidu Kona^{1*}, 2nd Rachita Dhurat¹, 3rd Radha Mudhra¹, 4th Smita Ghate¹

¹ Department of Dermatology, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, Maharashtra, India.

*Corresponding author: sradda075@gmail.com

1. Background:

Trichorrhexis nodosa is a hair shaft disorder which presents with whitish nodes all over the hair (diffuse form) or localized to an area (localized form). It could be either congenital or acquired. It is ultimately a response to physical or chemical trauma that leads to formation of nodes along the hair shaft. The condition was first described in 1852 by Samuel Wilks, but the term trichorrhexis nodosa was introduced in 1876 by M. Kaposi. We are reporting a case of acquired localized form of trichorrhexis nodosa due to trauma.

2. Observation:

An 18 year old boy came with complains of abnormal appearance of the hair at the frontal area for 2 years. There was no history of itching/ any topical application/family history of similar complains. On enquiry patient gave history of repeated manipulation of hair at frontal area.

On examination multiple whitish points or nodes along the hair shaft were seen. A Hair mount was made that revealed a characteristic "paintbrush bristle appearance" of trichorrhexis nodosa.

A diagnosis of localised acquired trichorrhexis nodosa was made due to excessive manipulation of hair and patient was counselled for the same.

3. Key Message:

Patients with trichorrhexis nodosa present with a history of white flecking, abnormal fragility and failure to attain normal hair length because of premature breakage of the hair fiber. The acquired form is more common than the congenital form, localized form is more common than the diffuse form and the latter is usually reported with the hereditary form.

Congenital trichorrhexis nodosa becomes apparent at birth or infancy. Acquired trichorrhexis nodosa falls into three basic categories: proximal, distal, and localized. Management is by avoidance of chemical or physical trauma to hair.

PREVALENCE OF COMORBIDITIES IN PEDIATRIC ALOPECIA AREATA

Rosalynn RZ. Conic MD, PhD¹, Nina Lucia Tamashunas BS^{2,*}, Giovanni Damiani MD², Wilma F. Bergfeld MD³

¹Department of Surgery, University of Maryland, Baltimore, Maryland, USA

²Case Western Reserve University, Cleveland, Ohio, USA

³Department of Dermatology and Plastic Surgery, Cleveland Clinic, Cleveland, Ohio, USA

*Corresponding author: nlt23@case.edu

1. Background: Comorbidities are associated with higher health care costs, complex management, and poorer health outcomes. Identification and treatment of comorbid conditions in pediatric alopecia areata (AA) patients could provide an opportunity to improve health outcomes.

2. Aims and Objectives: The objective of this study was to determine the prevalence of comorbidities among pediatric patients with AA using a large de-identified, aggregated patient database.

3. Methods: Pediatric patients with AA were identified in Explorys, an aggregated electronic health record database comprising over 360 hospitals. Chi-squared test was used to assess different categorical variables between pediatric AA patients and pediatric patients without AA. Logistical regression was used to construct odds ratios.

4. Results: Of the 8,314,220 pediatric patients, 3,510 (1,570 males and 1,940 females) had a diagnosis of AA. The most common comorbidities with a prevalence greater than 1% included atopic dermatitis (17.4%, $p<0.001$), anemia (7.7%, $p<0.001$), obesity (5.7%, $p<0.001$), vitamin D deficiency (5.1%, $p<0.001$), hypothyroidism (2.6%, $p<0.001$), depression (2.6%, $p<0.001$), vitiligo (1.4%, $p<0.001$), psoriasis (1.4%, $p<0.001$), hyperlipidemia (1.4%, $p<0.001$), and diabetes mellitus (1.1%, $p<0.001$).

5. Conclusions: Findings from this study suggest that children with AA are more likely to have certain autoimmune and metabolic disorders than the general pediatric population.

A CASE OF ANDROGENETIC ALOPECIA IN A YOUNG WOMAN

1Inga Kozyrenko, Russia

*Corresponding author: inga_kozyrenko@mail.ru

1. Background:

Standard treatment for a patient with androgenetic alopecia is usual includes drugs with minoxidil or systemic antiandrogen drugs. In this case, the patient managed to try both of these methods and was unsatisfied with the result.

2. Aims and Objectives:

The aim of the study was to reduce inflammation and soreness of the scalp, the number of yellow spots and stimulate hair growth.

3. Methods:

For the diagnosis and subsequent assessment of the dynamics of treatment, trichoscopy, a phototrichogram and overview photographs were used.

Anti-inflammatory shampoos were used for treatment, as well as stimulants based on only natural ingredients such as Creatine, Serenoa serrulata fruit Extract, niacinamide, escin, dipotassium glycyrrhizinate, Camellia sinensis leaf extract and etc

4. Results:

After treatment:

- % reduction in telogen hair
- increase in average hair diameter
- hair density increase

5. Conclusions:

Not always even systemic antiandrogen therapy brings positive results, as a properly prescribed anti-inflammatory and stimulating therapy.

CIRCLE HAIRS IN A CARDIAC TRANSPLANT PATIENT.

Anna Lyakhovitsky¹, Theodoulos Drousiotis¹, Hagai Landov¹, Sharon Baum¹, Aviv Barzilai¹.

¹Department of Dermatology, Sheba Medical Center, Tel-Hashomer, affiliated with the Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel.

*Corresponding author: Anna Lyakhovitsky, E-mail:
anna.lyakhovitsky@sheba.health.gov.il

Background: Circle hair was first described by Adatto in 1963. It is rare hair disorder of unknown etiology characterized by hairs growing in a perfectly circular manner without signs of follicular inflammation. Circular hairs were reported in middle-aged, obese, hairy males with involvement of the trunk, shoulders and thighs. There are no reported cases linking CH to medications or pre-existing medical conditions, unlike another hair growth disorder, rolled hairs. Rolled hairs were described in association with different medical conditions and medications, and also following renal transplantation.

Observation: A 60 year old male cardiac transplant patient presented multiple hyperpigmented papules on trunk and extremities that appeared several weeks after transplantation. Trichoscopy demonstrated multiple, dark-colored circularly arranged hairs, some of them with subcorneal location. Our case is the first case of circular hair in transplant patient.

Key Message: Trichoscopy is an excellent tool for evaluation of body hair. Further descriptions of body hair disorders would help to improve our knowledge on the subject.

ALOPECIA AREATA AND TRICHOTILLOMANIA OVERLAP IN PEDIATRIC AGE GROUP- AN UNDER RECOGNISED SPHERE?

DR. SAMIPA SAMIR MUKHERJEE^{1,*}

1MBBS,DDV,DDVL,FRGUHS(Pediatric Dermatology), Consultant Pediatric Dermatologist and Dermatologist, Cloudnine Hospitals, Bengaluru, India

*Corresponding author: drsamipamukherjee@gmail.com

1. Background:

Alopecia areata and trichotillomania are both non scarring alopecias presenting as patchy hair loss of different etiology. Alopecia areata is considered as an autoimmune disorder whereas trichotillomania is an expression of obsessive and compulsive disorders defined by the urge to pull the hair. The co existence of both these disorders have been described in literature. Stress has been long implicated in precipitating alopecia areata. Also literature suggests although alopecia areata is predominantly asymptomatic, about 14% patients experience burning sensation or pruritus in the affected area. Fairly specific dermoscopic findings have been recognised in both disorders. However in this subgroup of overlap between the two disorders the question arises whether it is a true co existence of two different dermatological disorders or whether symptomatic alopecia areata leads to secondary changes that mimic trichotillomania.

2. Observation: A series of 9 patients of non scarring patchy alopecias in the age group of 7years – 16 years of age, with duration of their hair loss ranging from 1month to 7 months were subjected to dermoscopic examination after thorough history taking and clinical examination. Trichoscopic examination revealed classical signs of alopecia areata like yellow dots, black dots, exclamation mark hair and broken hair. Trichoscopy also revealed flame hairs, v hair, burnt match stick sign hair, mace sign, perifollicular hemorrhage, broken hair of variable lengths and coarse black dots. Of note was the finding of perifollicular hemorrhage which was present only in one patient. Burnt match stick sign thought to be more specific for trichotillomania was seen in almost all cases. All patients had a positive history of atopy. Psychiatric evaluation was sought for the patients and counselling with therapy was recommended. Trichoscopic guided histopathology evaluation was done for only one patient which was suggestive of alopecia areata and trichotillomania.

Limitation:

Histopathological evaluation was not done for all patients.

3. Key Message:

The case series highlights that with the advent of trichoscopy, coexistence of trichotillomania and alopecia areata may be more of an under recognised phenomenon rather than rarity. However further studies are required to decipher the molecular basis of their true coexistence or whether symptomatic alopecia areata leads to secondary changes mimicking trichotillomania.

TRICHOSCOPIC FINDINGS in 300 FRONTAL FIBROSING ALOPECIA PATIENTS. THE EXPERIENCE FROM A SINGLE CENTER IN GREECE.

Sofia Papanikou,^{1*} Vasiliki Chasapi²

1. Dermatologist, Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece.

Email: sopavage@yahoo.gr

2. Head of Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece. (Email: chasapiresearch@gmail.com)

Background: Frontal Fibrosing Alopecia (FFA) is a primary lymphocytic cicatricial alopecia, described by Kossard in 1994. Trichoscopy is a valuable noninvasive method that helps the dermatologist to diagnose and follow up the majority of hair diseases.

Aims and Objectives: The purpose of this study was to record the trichoscopic findings of patients with FFA examined at "A. Sygros " Hospital, Athens, Greece

Methods: 300 patients with FFA were enrolled in the hospital, and a special questionnaire based on their socio-demographic and medical data was used in order to collect the data.

The examination was carried out using a polarized and a non-polarized dermatoscope and pictures of the examined areas were taken as well. The statistical program SPSS 22. was used for the analysis.

Results: 300 patients were studied, of whom 284 (94.7%) were women and 16 men (5.3%). Their age ranged from 26 to 92 years with an average of 61.7. The duration of the disease ranged from 0.5-32 years with an average of 6.6 years. 159 patients (53%) had a less than 1 cm recession, 93 (31%) had 1-2.99 cm, 35 (11.7%) 3-4.99. Lonely hairs were observed in 183 patients (61%). Perifollicular erythema had 58% of them and perifollicular hyperkeratosis 52.7%. Follicular plugs were observed in 6.3% of the patients, loss of follicular openings in 214 (71.3%) and atrophy in 62.7%.

Conclusions: The completion of the study highlighted the trichoscopic findings of the patients and the findings are consistent with the results of relevant studies from the international literature.

HOW THE EXTENDED ALOPECIA AREATA AFFECTS THE QUALITY OF LIFE AND THE EMOTIONAL WELLBEING OF 135 PATIENTS.

Vasiliki Chasapi, 1* Sofia Papanikou 2

1Head of Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece.

Email: chasapiresearch@gmail.com

2Dermatologist, Dermatology and Venereology Department NHS, «Andreas Sygros» Hospital for Skin and Venereal Diseases, Athens, Greece.

Background: Alopecia areata (AA) is an autoimmune, relapsing condition, and the most common cause of sudden, localized or/and generalised hair loss. AA can have substantial psychological and psychosocial consequences. A few studies are available in the literature on the effects of AA on the Quality of Life (QoL) of patients.

Aims and Objectives: The aim of this study was to evaluate the QoL of patients with extensive forms of AA, as well as the anxiety and depression levels and possible association with the treatment, chronicity of the disease and the social-demographic characteristics.

Methods: The sample of the study was 135 patients with AA with >50% hair scalp extent or total scalp hair loss or/and universal scalp and body hair loss, from the outpatient clinic and the Department of Physiology-Hair Disorders of "A. Sygros" Hospital. For the assessment of the QoL parameters, a composite questionnaire was designed, which includes the tools: the specific quality of life index in Dermatology (DLQI), the Rosenberg Self-Esteem Scale and the Hospital Anxiety and Depression Scale (HADS). It also included questions about social demographics data and data of the medical history of the patients. The questionnaire was completed by the patients themselves and analyzed statistically by the SPSS, 22.0.

Results: QoL of the patients with extensive AA was negatively affected in 80% of cases. Also, there were positive relationship between AA and psychiatric morbidity. Anxiety was noticed in 27,1% of cases and depression in 13,6% of patients.

Conclusions: Women reported poorer QoL compared with men. In women, the impaired QoL was associated with psychosocial dysfunction. If the social life relationships had been significant affected, QoL was more impaired.

COMBINATION THERAPY WITH HYDROXYCHLOROCHINA AND FINASTERIDE FOR CONCOMITANT FRONTAL FIBROSING ALOPECIA AND LICHEN PLANOPILARIS IN A MAN.

A. Patri,^{1,*} A. Perrotta,¹ M. C. Annunziata,¹ M. Vastarella,¹ M. Cantelli,¹ P. Nappa,¹ and G. Fabbrocini¹

Affiliation: ¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Via Pansini 5, Napoli, Italy;

*Corresponding author: patriangela.ap@gmail.com

Background. Frontal fibrosing alopecia (FFA) is a lichen planopilaris (LPP)-variant scarring alopecia that has rarely been described in men. Moreover, the detection in the same patient of both FFA and LPP is very uncommon.

Observation. We report the case of a 58-year-old man presented with clinical signs compatible with the diagnosis of FFA, confirmed by a 4 mm punch biopsy. A therapy with hydroxychloroquina 200 mg/die, metilprednisolone 4 mg/die, clobetasolo lotion, once a day, was started with progressive clinical improvement. After 2 months, however, the trichoscopic evaluation of the vertex area showed peripilar casts, perifollicular and diffuse erythema, as well as reduced hair density: LPP had developed after FFA. Finasteride 1 mg/day, minoxidil 5%, 2 ml/day, and triamcinolone infiltrations in the vertex area, once a month, were added to the treatment. After one year, both FFA and LPP seem to be stable, with reduction of scalp inflammation and improvement of hair density in the vertex area.

Key Message. Although most often reported among postmenopausal women, FFA also occurs among men. Currently, no treatment protocols exist for FFA or LPP. Combination therapy with hydroxychloroquina and finasteride seems to be a valid therapeutic strategy in patients affected with both FFA and LPP.

HAIR IN DERMATOLOGIC DISEASE

A. Patri,^{1,*} M. C. Annunziata,¹ M. Cantelli,¹ M. Vastarella,¹ P. Nappa,¹ and G. Fabbrocini¹

Affiliation: ¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Via Pansini 5, Napoli, Italy;

*Corresponding author: patriangela.ap@gmail.com

Background: Hair and scalp may be affected by several diseases with polymorphous manifestations. Psoriasis, seborrheic eczema, dermatomyositis, syphilis, pityriasis rubra pilaris and morphea can result in a secondary alopecia.

Observation: Scalp psoriasis and seborrheic eczema represent the most frequent scalp diseases. Sharply demarcated erythematous-squamous plaques across the natural hairline in psoriasis are opposed to blurred dark-red erythema and yellowish, greasy scales in seborrheic eczema. Whereas with the latter diffuse alopecia may frequently be found, hair loss is less commonly seen in psoriasis and may also be related to therapeutic agents. In dermatomyositis, scalp involvement and non-scarring alopecia are common. Syphilitic alopecia is an uncommon manifestation of secondary syphilis. Type II pityriasis rubra pilaris is characterized by ichthyosiform lesions in association with alopecia and eczema. Morphea can result in a secondary scarring alopecia.

Key Message: Clinical evaluation as well as trichoscopy, laboratory findings and skin biopsy help clinicians to distinguish among hair disorders in dermatologic disease, in order to administer an early and appropriate therapy.

HAMILTON-NORWOOD TYPE VII ANDROGENETIC ALOPECIA SUCCESSFULLY TREATED WITH MESOTHERAPY

Recoder M^{1*}, Mariotto F¹, Mariotto A¹, Drumond B¹

1. Instituto Mariotto Recoder, Belo Horizonte, Brazil.

* manuela@mrinstituto.com.br

Background: Androgenetic alopecia (AGA) is the most frequent cause of hair loss in both genders and it is the most frequent cause of consultation at specialist hair clinics.

Although it is very prevalent, approved therapeutic options are limited: only topical Minoxidil and oral Finasteride for man are FDA approved.

Mesotherapy was first introduced in 1952 by French physician Pistor. It is a non-surgical where active substances are injected intradermally into a depth of about 4 mm.

Observation: We report a case of a 43 years old male patient with AGA Hamilton-Norwood type VII with no previous treatment.

He was treated with 12 sessions of mesotherapy containing a sterile blend of minoxidil, finasteride, biotin, D-panthenol and lidocaine. The injections were performed every two weeks and the distance from every point of injection was 1 cm, contemplating the whole androgen dependent scalp area. No side effects were described during or after the treatment.

We manage the response assessment with global clinical photographs at the 7th and the 12th session. A significant hair regrowth was seen with a visible improvement in hair density and thickness on both moments.

Key Message: Although in general AGA is socially accepted as a natural process in man's life it may highly affect patient's quality of life and self-esteem.

As the approved treatment options are very restricted many new treatments have been introduced in recent years.

THERAPEUTIC SUCCESS IN FIBROSING FRONTAL ALOPECIA: CASE REPORT

Recoder M^{1*}, Mariotto F¹, Mariotto A¹

1. Instituto Mariotto Recoder, Belo Horizonte, Brazil.

* manuela@mrinstituto.com.br

Background: Fibrosing Frontal Alopecia (FFA) is a progressive cicatricial alopecia, with predilection for the frontotemporal hairline, included in the context of dermatological emergency.

Currently being classified as variant of lichen planopilaris once they are histologically indistinguishable evidencing lichenoid infiltrate.

It occurs mostly in postmenopausal women and the numbers of reported cases are increasing, although the origin remains uncertain.

Observation: 44 year-old premenopausal female with 4 months history of progressive hairline recession over frontotemporal area, loss of eyebrows and appearance of facial papules.

Trichoscopy findings were: perifollicular scaling and erythema. Eyebrow presented red dots and body hair appeared normal.

Biopsy confirmed the diagnosis of FFA.

Treatment was prescribed: oral Finasteride 5mg per day, topical Clobetasol ointment and topical Minoxidil 5% both twice a day. 6 sessions of Platelet Rich Plasma associated with Triamcinolone (2,5mg/ml) every 2 weeks.

After 3 months partial repilation of the affected area was seen and a good improve on the perifollicular scaling.

Key Message: The knowledge of this condition is very important to achieve early diagnosis and begin immediate and appropriate treatment.

The main treatment goal is to stop progression of the disease and repilation is rarely achieved.

The use of intradermal combination of PRP and Triamcinolone in addition with the use of topical Minoxidil, topical high potency steroids and oral Finasteride proved extremely effective in this case of early diagnosis.

VERY LOW DOSE ORAL MINOXIDIL AS MONOTHERAPY IN MALE ANDROGENETIC ALOPECIA

Corina Isabel Salas-Callo^{1,*}, Rodrigo Pirmez¹.

¹Department of Dermatology, Instituto de Dermatologia Professor Rubem David Azuly, Hospital da Santa Casa da Misericórdia do Rio de Janeiro, Brazil.

*Corresponding author: salas.corina@gmail.com

Background: Androgenic alopecia (AGA) is the most common type of alopecia in men. The only drugs approved for the treatment of male AGA are oral finasteride and topical minoxidil. Recently, Sinclair described the use of oral minoxidil (OM) 0.25mg/day for the treatment of female AGA, with positive results.

Aims and Objectives: To evaluate the therapeutic response of patients with male AGA to OM at very low dose.

Methods: A retrospective study was made of the medical history (2017–2018) of male patients with AGA, who had monotherapy with formulated capsules of OM 0.25mg/day for a minimum of 24 weeks, with clinical–trichoscopic photographic record. The pre and post treatment evaluation was done by trichoscopic analysis of the frontal region and vertex using TrichoLab Snap/Hair-to-Hair Match™ software. Parameters examined were: total hair density/cm² (THD), density of terminal hair/cm² (DTH), new hairs/cm² (NH) and new terminal hairs/cm² (NTH).

Results: We included 25 patients with a mean age of 36.7 years (range 25–53 years). Ten patients (40%) with AGA II–III vertex and 15(60%) with AGA IV–VI on the Hamilton/Norwood scale. After 24 weeks, treatment improvement or stabilization was seen in a percentage of the patients in the parameters analyzed. At the frontal region: THD 60%, DTH 40%, NH 52%, NTH 48%, and vertex: THD 40%, DTH 44%, NH 40%, NTH 44%. There was a statistical tendency to better response in patients with mild to moderate AGA(II-III vertex) in DTH/cm² ($p=0.075$) but not statistically significant. Adverse effects: pedal edema 1(4%), shedding 4(16%) and hypertrichosis 5(20%). No differences in mean arterial pressure seen. No patient interrupted OM treatment due to adverse effects.

Conclusions: Until now there is no standard dose for OM treatment for AGA. In this study, a better response was seen in patients with mild to moderate AGA.

LUPUS ERYTHEMATOUS CHRONIC CUTANEOUS SCALP WITH SEBORRHEIC KERATOSIS-LIKE PRESENTATION

Ana Cristina Schmidt Dorneles¹, Isadora da Luz Silva¹, Natália Andressa Buss Venier¹, Leandro Damiani¹, Ana Letícia Boff¹ and Renan Minotto^{1*}

¹Hospital Santa Casa de Misericórdia de Porto Alegre, Brasil

*Corresponding autor/ Coordinator and Prof of The hair and nail unit of the service:

R. Minotto. E-mail: rminotto@gmail.com

1. Background:

A 63 year old female patient, for 4 - years, with diagnosis of cicatricial alopecia due erythematous lupus biopsy-confirmed, with slight scalp rarefaction in the vertex area and with lesions yellowish crusted appearance with telangectasis and erythema in scalp, assintomatic. She was evaluated by a rheumatologist who found no systemic disease. Presented lesions with similar appearance to seborrheic keratosis all over the patient's scalp. It was decided to perform a new biopsy of yellowish lesions with papulous aspect, keratotic, in the parietal region. The histopathology was compatible with discoid lupus erythematosus. In this case, we observed lesions keratosis seborrheic-like in scalp, presenting discoid lupus diferent from those described in the literature.

2. Observation:

Scalp is one of the most commonly affected sites in the discoid lupus erythematosus, approximately 60% of patients, being 1/3 of them presenting with cicatricial alopecia.

The described changes associated with lupus are very diverse. Classically the lesion is a well-demarcated erythematous scaly plaque with epidermal atrophy, follicular plugging, central hypopigmentation and pheriperal hyperpigmentation in dark-skinned individuals.

3. Key Message:

We describe patient already diagnosed with cronic discoid lupus, but with lesions classically not associated with lupus, and similar to lesions prevalents in dermatology, keratosis seborrheic, confirmed biopsy, also to manifection of the disease.

TITLE :MONILETHRIX – A RARE INHERITED HAIR SHAFT DISORDER : DIAGNOSIS BY

TRICHOSCOPY

Ravina Surve 1 Rachita Dhurat 1, Sanober Daruwalla 1 *, Jill Chitalia1 , Tejas Vishwanath1

1-Lokmanya Tilak Medical College and Municipal Hospital , Sion , India

Email address-sanober46@gmail.com

1. Background: Monilethrix is a rare inherited hair shaft disorder characterized by fragility of hair shafts resulting in alopecia and follicular keratosis. It is of autosomal dominant inheritance and the genes most commonly implicated are hHB1 and hHB6 genes on chromosome 12. We herein report a case of monilethrix where dermoscopy helped in rapid diagnosis of the disease and helped in estimating the extent of involvement.

2. Observation: A 7-year-old girl, born of non consanguineous marriage presented to us with a history of decreased hair growth, easy breakability of hair and diffuse alopecia since 6 months of age. She had normal hair at birth. Within 2-3 months of age, the parents noticed gradual development of multiple, asymptomatic, keratotic, tiny papules on the scalp along with breakage of hair and alopecia.

On examination, there was thinning and shortening of hair. All the hairs were rough and lusterless. Keratotic papules were present on the scalp and nape of neck. The hair over the eyebrows, eyelashes were also sparse. Dermoscopy of the scalp showed few beaded hair with equidistant nodes and internodes described in literature as "regularly bended ribbon sign". On the scalp, white dots were also seen. The eyebrow showed no hair clinically but on dermoscopy, beaded short hairs were seen. Hair microscopy was performed, and it showed regular beading of hairs .

3. Key Message: Monilethrix is a rare condition that can be identified through characteristic findings. Diagnosis by dermoscopy helps in rapid diagnosis, extent of involvement, also to choose a hair for microscopy to get maximum yield of abnormal features. Further, Dermoscopy may prevent the misdiagnosis of iatrogenic pseudomonilethrix which is caused by pressed overlapping hair in glass slides. Therefore, dermoscopy may provide an alternative to standard light microscopy for examination of affected hairs.

FRONTAL FIBROSING ALOPECIA IN SKIN OF COLOR PATIENTS: DEMOGRAPHICS AND CLINICAL PROFILE

1st Lu Yin BA,¹ 1st Katerina Svigos BA,¹ 2nd Daniel Gutierrez MD,¹ 3rd Erik Peterson,¹ 4th Kristen Lo Sicco MD,¹ and 5th Jerry Shapiro MD^{1*}

¹The Ronald O. Perelman Department of Dermatology, New York University School of Medicine, United States of America

*Corresponding author: Jerry.Shapiro@nyulangone.org

1. Background:

Frontal fibrosing alopecia (FFA) is a variant of lichen planopilaris and presents with scarring frontotemporal hairline recession. Seen commonly in post-menopausal Caucasian women, it is also described in pre-menopausal women, men, and non-Caucasians¹⁻⁴. In skin of color patients (SOC) FFA is often misdiagnosed,⁵ and little data exists regarding presentation.

2. Aims and Objectives:

This study describes FFA in SOC patients to better characterize patterns of presentation.

3. Methods:

A retrospective analysis of FFA patients treated at NYU Langone Health from 2007 to 2018 identified 11 female SOC patients. Diagnosis was based on clinical presentation with histopathological confirmation when necessary. Improvement was defined as resolution of symptoms, decreased inflammatory activity on trichoscopy, or slowing of hair loss.

4. Results:

Of the 11 patients, 5(45%) were Asian, 1(9%) was Black, and 5(45%) were Hispanic. Average patient age was 53 years (range 37-70) and 55% (6/11) were post-menopausal. Patients reported eyebrow loss (55%), body hair loss (9%), and scalp pain, burning or erythema (9%). Physical examination found facial papules (36%) and prominent facial veins (18%). Most commonly, patients were treated with intralesional triamcinolone, topical tacrolimus, clobetasol solution and topical minoxidil 5%.

5. Conclusions:

We found most SOC patients with FFA were post-menopausal, and second to frontotemporal hairline recession, eyebrow involvement was the most common exam finding.

References:

1. Krueger L, Svigos K, Brinster N, Elbuluk N. Frontal fibrosing alopecia: cutaneous associations in women with skin of color. *Cutis*. 2018;102(5):335-338.
2. Peterson E, Gutierrez D, Brinster NK, Lo Sicco KI, Shapiro J. Frontal Fibrosing Alopecia in males: demographics, clinical profile and treatment experience. *J Eur Acad Dermatol Venereol*. 2019.
3. Dlova NC. Frontal fibrosing alopecia and lichen planus pigmentosus: is there a link? *Br J Dermatol*. 2013;168(2):439-442.
4. Ormaechea-Perez N, Lopez-Pestana A, Zubizarreta-Salvador J, Jaka-Moreno A, Panes-Rodriguez A, Tuneu-Valls A. Frontal Fibrosing Alopecia in Men: Presentations in 12 Cases and a Review of the Literature. *Actas Dermosifiliogr*. 2016;107(10):836-844.
5. Miteva M, Tosti A. The follicular triad: a pathological clue to the diagnosis of early frontal fibrosing alopecia. *Br J Dermatol*. 2012;166(2):440-442.

PILI TORTI AND LOOSE ANAGEN SYNDROME FOLLOWING BONE MARROW TRANSPLANT

Anastasia Therianou, MD, PhD¹, Antonella Tosti, MD²

1. Imperial College Healthcare NHS Trust, London, UK
2. Dr. Phillip Frost Department of Dermatology and Cutaneous Surgery
University of Miami Miller School of Medicine, US

*Corresponding author: a.therianou@nhs.net

1. Background:

A 16 year old female patient complained of regrowth of sparse, dry, unruly and lustreless hair after chemotherapy for allogenic bone marrow transplant due to diffuse large B-cell lymphoma, non-germinal center B-cell like type. Her chemotherapy included EPOCH-R (etoposide, prednisone, vincristine, cyclophosphamide, doxorubicin and rituximab). One year after the transplant she developed cutaneous and intestinal GvHD that was successfully treated with tacrolimus, extracorporeal photophoresis and steroids.

2. Observation:

Hair pull test revealed painless removal of hair. Microscopy evaluation of hairs revealed anagen hairs devoid of sheaths. Most hair shafts were twisted at irregular intervals. The diagnosis of pili torti and loose anagen syndrome has been made. Hair pull test revealed painless removal of hair. Microscopy evaluation of hairs revealed anagen hairs devoid of sheaths. Most hair shafts were twisted at irregular intervals. The diagnosis of pili torti and loose anagen syndrome has been made.

3. Key Message:

Loose anagen hair syndrome can be a familial or sporadic syndrome and is thought to be secondary to faulty cornification of the inner root sheath, which causes poor anchoring of anagen hairs.¹ Pili torti can be congenital or acquired, dominant autosomal disease and may be associated with anorexia, malnutrition, neurosensorial deafness and is probably caused by changes in the internal hair sheath.² In our case bloods tests for nutrition deficiency were normal and patient has good psychomotor development. Acquired pili torti can occur in patients treated with oral retinoids. There also a few reports of pili torti in patients with GvHD¹. A case of pili torti and loose anagen hair has been reported after treatment with erlotinib². To our knowledge this is the first case of pili torti with loose anagen syndrome after chemotherapy for bone marrow transplantation.

References

1. Penzi LR, Saavedra A, Senna MM. Long-standing pili torti in 2 patients with chronic graft-vs-host disease. *JAAD Case Rep.* 2017;4(1):44–46. Published 2017 Dec 18. doi:10.1016/j.jdcrr.2017.10.0202.
2. Pirmez R, Pineiro-Maceira J, Gonzalez CG, Miteva M. Loose anchoring of anagen hairs and pili torti due to erlotinib. *Int J Trichol* 2016;8:186-7

EVALUATION OF EFFICACY AND SAFETY OF FINASTERIDE 2.5 MG IN POSTMENOPAUSAL WOMAN WITH ANDROGENETIC ALOPECIA

M. Vastarella¹, M. Cantelli¹, P. Nappa¹, M.C. Annunziata¹, A. Patri¹ and G. Fabbrocini¹

Affiliation:

¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy

*Corresponding author: marinavastarella@gmail.com

1. Background: Androgenetic alopecia, is a hair loss disorder mediated by dihydrotestosterone, the potent form of testosterone. It is characterised by a gradual loss of hair and has distinctive patterns of loss in women as compared to men, but in both sexes, the central scalp is more affected. It often begins around puberty and is reported to affect the individual's self-esteem and quality of life. In opposition to the high prevalence of androgenetic alopecia, the approved treatment options are limited. Indeed finasteride and minoxidil are the only approved drugs for androgenetic alopecia.

2. Aims and Objectives: We evaluated the efficacy and safety of oral finasteride (2.5 mg/day) for six months in 20 post-menopausal female patients with mild to severe androgenetic alopecia.

3. Methods: In this placebo-controlled, randomised study 20 postmenopausal women (43-60 years of age) with AGA received finasteride 2.5 mg/day or placebo for six months. Effectiveness was evaluated by scalp hair count, trichoscopic evaluation (hair thickness assessment) subjective questionnaire for patients and evaluation of overall photographs

Data on safety have been assessed by the survey, and laboratory tests in all woman enrolled in the study.

4. Results: After six months of therapy, there was a significant difference in the variation in hair number and hair thickness between the finasteride and placebo groups. The overall effect of hair growth was seen in 16 of the 20 women in the finasteride-treated group (80%) vs (25%) in placebo group $p < 0.001$. In the finasteride-treated group, hair increased significantly (25%), moderately (31.25%) and slightly (43.75%). Moreover, there was a substantial increase in frontal/parietal scalp hair count. Likewise, the photographic evaluations and the patient's subjective assessment showed an improvement in slowing down hair thinning, increasing hair growth or improving hair appearance in finasteride-treated subjects compared to the placebo group. Finasteride was generally well tolerated.

5. Conclusions: Oral finasteride used in the long-term study maintained progressive hair regrowth without recognised side-effect.

AWARENESS, KNOWLEDGE AND PERCEPTIONS AMONG THE SPECIALITY DERMATOLOGISTS FOR THE CLINICAL BENEFITS OF HAIR GROWTH SERUM

Authors

M Vedamurthy,^{1*}, K Ram ² , S Vartak ³ , I Williams ⁴ , U Chandra ⁵ , C Bhar ⁶, V Saxena ⁷, V Adhe ⁸ , P Bhardwaj ⁹ , B Bhattacharya ¹⁰

Author's Affiliation

1 RSV Skin and Laser Center, Chennai, India

2 Skin and Hair Elegance Laser Clinics, Hyderabad, India

3 Skin Clinic, Nasik, India

4 Dermico Skin Clinic, Chennai, India

5 Chandra Skin Clinic, Delhi, India

6 Nebula Skin Clinic, Kolkata, India

7 Diva Clinic, Lucknow, India

8 Eternis Skin, Hair and Laser Clinic, Pune, India

9 Manipal Hospital, Bangalore, India

10 Calcutta Heart Clinic and Hospital, Kolkata

*Corresponding author: abstractsubmissionnow@gmail.com

Background: A unique hair growth serum is used clinically for the benefits of Redensyl and Unitriolenol T-27. Consistent scientific dissemination of the information based on the recent data of the novel product was delivered. Perception mapping was conducted through a mind map technique based on a 5 point questionnaire, to evaluate the change in the perception and understand the impact of the change, executed through a customised electronic platform over a smartphone. ANOVA was used for the statistical analysis.

Observation: 50 dermatologists over three months were approached across India and the response rate, in the first, second and third interaction was 43, 46 and 39 respectively. Cumulatively, participants had rich clinical experience of 800-man hours. 41.86% (n=18) were of opinion that, hair loss is associated with depression, introversion, neuroticism and feeling of being unattractive which was consistent response even in second interaction 32.6 % (n=15). 76.7 % (n=33) believed that, improvement in overall health and sense of well-being is most important parameter to assess quality of life during follow up, which was consistent response in second and third interaction 76 % (n=35), 66.6 % (n=26), respectively.(p=0.83 NS). 46.5 % (n=20) believed, Redensyl in comparison with Minoxidil improves hair follicle growth by 1.8 times. 65.11 % (n=28) had firm believe that

most important mechanism for effect of Dihydroquercetin-glucoside component (DHQG) treatment on gene expression that helps to translate 360-degree hair growth galvanizer approach as an effective modality of treatment, is due to Impact on hair follicle bulge stem cells phenotype maintenance, which was consistent in the second 63 % (n=29) and third interaction 61.5 % (n=24). 43.5 % (n=17) dermatologists in third interaction strongly were of opinion that, Unitrienol T-27 is responsible to regulate sebum content and increase the moisture content, which translates into actual clinical benefits. This opinion was quantitatively much higher as compared to first interaction wherein 32.5 % (n=14) believed for the same opinion

Key Message: The consistent dissemination of the evidence-based medicine of the hair growth serum has immense potential to translate into realistic clinical benefits in dermatology practice

REFLECTANCE CONFOCAL MICROSCOPY PERFORMED ON “EN COUP DE SABRE” MORPHEA OF THE FACE AND SCALP: A USEFUL ANCILLARY TECHNIQUE

Vollono L.1 Mazzilli S.1, Campione E1., Bianchi L1.

1Dermatology Unit, Department of “Medicina dei Sistemi”, Tor Vergata University, Rome, Italy

*Corresponding author: laura.vollono@gmail.com

Clinical case

1. Background: En coup de sabre morphea is a clinical variant of morphea, characterized by a linear lesion located in the frontoparietal scalp and/or the paramedian forehead, resembling a stroke from a sword. It affects the skin and subcutaneous connective tissues and may extend to the underlying musculature, cartilage, and osseous structures, with or without association with neurologic symptoms. The condition is more common in women and is associated with a higher rate of autoimmune disorders. Diagnosis is based on clinico-pathological correlation. Histopathological features vary, ranging from pictures of sparse perivascular inflammatory infiltrate with mild or absent fibrosis to pictures characterized by prominent sclerosis with no inflammation. Distinguishing between early (“inflammatory”) and late (“sclerotic”) stages of the disease may guide the clinician in the management of the patient and the choice of the best therapeutic option. However, multiple biopsies may not be accepted by the patient. Reflectance confocal microscopy is a non-invasive technique that may be performed multiple times over time, allowing the clinician to assess the stage of disease and to monitor the response to treatment.

2. Observation: A 50 year-old woman presented to our clinic for evaluation of an alopecic patch on her scalp that appeared 1 year prior on the right side of the forehead, progressively expanding over time. Dermatological examination revealed an ivory-colored, atrophic and indurated hairless area involving her scalp and forehead, arranged in a linear fashion with an “en coup de sabre” appearance. On her right forehead, atrophy of the subcutaneous tissues and bone recess with facial dismorphism was observed. Personal history included positivity for antinuclear antibodies for many years. Family history reported a case of death for severe systemic sclerosis.

Reflectance confocal microscopy (RCM) describes the marked dermal sclerosis with severe eccrine gland atrophy and replacement of much of the adipose by collagenous tissue. All sebaceous glands had disappeared, but erector pili muscles persisted. Numerous vertical, columnar and epithelial structures were present at the sites of formerly viable hair follicles. These atrophic follicular remnants had a resemblance to telogen follicles but were microscopically different. The morphology of these follicular remnants indicates an end-stage process permanent alopecia. Histopathological examination of a punch biopsy specimen taken from the scalp revealed thickened collagen bundles infiltrating the entire dermis extending into the subcutaneous fat with mild perivascular and focal interstitial lymphocytic infiltrate. Atrophy of sebaceous glands and follicular remnants consistent with an end-stage alopecia were also observed. A diagnosis of late “en coup de sabre” morphea was made. As the inflammatory infiltrate was consistent, treatment with methotrexate 7,5 mg/week was prescribed.

3. Key Message: To our knowledge, this is the first report regarding the use of reflectance confocal microscopy as an ancillary diagnostic technique in linear localized morphea of the scalp and face. This non-invasive technique may represent a useful tool in distinguishing between early stages of the disease, with prevalence of inflammatory lymphocytic infiltrate, and late stages characterized by more prominent sclerosis with mild or absent signs of inflammation.

LINEAR SCLERODERMA “EN COUP DE SABRE” IN A 9 YEAR OLD CHILD

Vulcan. T 1, Zboraş. I 1, Iacob. D 2, Şenilă. S 1,*

1 Department of Dermatology, „Iuliu-Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca, Romania

2 3rd Pediatric Department, „Iuliu-Haţieganu” University of Medicine and Pharmacy, Cluj-Napoca, Romania

* Şenilă Simona: simonassenila@yahoo.com

1. Background:

Linear scleroderma (morphea) is an autoimmune, inflammatory, fibrosing skin disorder. The linear type predominates in children and usually affects the extremities or the face. “En coup de sabre” (“cut of a sword”) is a rare subtype of the disease, presented as an atrophic linear plaque on the forehead extending upwards to the scalp (where cicatricial alopecia develops) or downwards to the face, affecting the eyebrows, the nose and the lips.

2. Aims and Objectives:

We hereby report a case of linear scleroderma in a child, highlighting the importance of the clinical-trichoscopic correlation for the diagnosis. The objectives of this particular case were to obtain complete hair regrowth and also to evaluate possible extracutaneous manifestations of the disease.

3. Methods:

A 9 year old boy, known with multiple respiratory infections, craniocerebral trauma and varicella, presented with a linear alopecic patch on the left parietal region. The physical exam revealed palpable adenopathy in the mandibular angle region and pharyngeal erythema, both correlated with the respiratory infection.

Local examination of the scalp showed an atrophic well-defined linear patch of alopecia of 8x1 cm in size, on the left parietal region, developed during the last 2-3 weeks. The trichoscopic image of the alopecic patch revealed scattered black dots, multiple broken hairs, loss of follicular openings on a whitish skin surface and also pili torti, suggestive features of linear scleroderma.

Laboratory tests exposed no inflammatory syndrome, rheumatoid factor, anti-nuclear antibodies, anti-DNA antibodies, anti-HIV 1/2 antibodies, IgM/ IgG Borrelia antibodies were negative; also viral hepatitis tests and Quantiferon test were negative, with a normal level of C3 and C4 complement.

On the electrocardiography sinus bradycardia was found. Cerebral CT was performed and the cerebral appearance was within normal limits. Ultrasonographic examination showed thickness of the epidermis between 0.3-0.48 mm and thickness of the dermis between 1.17-1.7 mm. In some alopecic areas the distinction between the superficial dermis and the deep dermis was erased. During the elastographic examination of the plaque we noticed a discrete reduction of elasticity.

Taking into account the clinical aspect, the typical trichoscopic features and the paraclinical explorations, the diagnosis of linear scleroderma “en coup de sabre” was established, with a LoSCAT (Localized Scleroderma Cutaneous Assessment Tool) activity index of 2 and LoSCAT damage index of 2.

The therapeutic approach included initially Methotrexate 15 mg/m²/week (body surface area of 1,082 equals 2,5 mg Methotrexate), Folic acid 5 mg/week and Prednisone 40 mg/day (1,29 mg/kg/day- June 2018). After a month, due to the good response, the Prednisone doses were tapered gradually to zero and five months later the corticosteroid therapy was stopped. After four months the treatment proved to be efficient, the alopecic plaque developed both vellus and terminal hair, with no erythema, atrophy or trichoscopic signs of activity, a LoSCAT activity index of 0 and damage index of 0 as well. Methotrexate 15 mg/m²/week and Folic acid 5 mg/week were continued for three more months, with good response and good tolerability.

4. Results:

Three months after the treatment cessation (March 2019), the hair had regrown on the alopecic patch, with no relapse and a LoSCAT activity/ damage index of 0.

5. Conclusion:

Linear scleroderma “en coup de sabre” is a rare disease that mainly affects the dermis and subcutaneous tissue, but it might extend to the muscle or underlying bone, causing important cosmetic and functional impairment. Initially considering an exclusive cutaneous disorder, new reports highlight the frequent neurologic and ophthalmologic complications. Methotrexate is considered an effective and safe therapy for these patients, as in our case complete remission was obtained after 7 months of treatment.

Up to 50% of the patients may present positive immunologic tests (anti-nuclear antibodies, anti-DNA antibodies), but in our case the diagnosis was established based on clinical, trichoscopic and characteristic cutaneous and soft tissue findings. Given the good response to the therapy with complete remission of the alopecic plaque, the prognosis in this case is favorable, but future relapses or nervous system disorders might appear, so close follow-up is mandatory.

AN UNUSUAL CASE OF STEATOCYSTOMA MULTIPLEX ON FACE AND SCALP: A CLINICOPATHOLOGIC AND DERMOSCOPIC REPORT.

Sayyad ATH1, Sharma A1, Agrawal S1, Dhurat R1, Shukla D1, Vishwanath T1.

Author information

1 Department of Dermatology, Lokmanya Tilak Municipal Medical College (LTMMC) and Sion General Hospital, Mumbai, India.

Abstract

BACKGROUND:

Steatocystoma multiplex is a benign skin disorder originating from the sebaceous and nevoid ducts. Commonly classified under hamartomas, they are distributed over the trunk, neck, axillae, and groin.

METHODS:

A 28-year-old male patient complained of multiple, asymptomatic skin-colored nodules over the face of 10-year duration. Clinical examination confirmed the historic findings of nontender, polysized, flesh-colored papules and nodules over the said distribution.

RESULTS:

On histopathology, a cyst was noted in the mid-dermis, lined by stratified squamous, agranular epithelium, which contained degenerated keratin. Nonpolarized dermoscopy showed a structureless, cream-colored area, and polarized dermoscopy revealed a distinctive, well-circumscribed, yellowish hue which was superimposed over the facial pseudoreticular pigmentary pattern. The findings were compatible with steatocystoma multiplex, and the patient was taken up for radiofrequency ablation.

CONCLUSION:

Herein, we report a rare variant of steatocystoma multiplex limited to the face and scalp subjected to dermoscopy and characteristic histological correlation. To the best of our knowledge and following a literature search, dermoscopic features of this condition have not been reported thus far.

DIPHENCYPRONE IN PEDIATRIC PATIENTS

M. Cantelli*¹, M. Vastarella¹, P. Nappa¹, M.C. Annunziata¹, A. Patrì¹ and G.Fabbrocini¹

Affiliation:

¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy

*Corresponding author: mariateresacantelli@gmail.com

Background: Alopecia areata is a common form of non-scarring alopecia that appears equally in males and females of any age, although children and adolescents are more commonly affected. The disorder is usually characterized by limited alopecic patches on the scalp, but more severe forms may affect the entire scalp (alopecia totalis) or body (alopecia universalis). Few studies have looked at therapies for this disorder in children, so much of the data are derived from adult literature and describe off-label use of medication. Generally, topical therapies consisting of topical steroids and topical irritating compounds/contact sensitizers are used. **Observation:** Diphencyprone is one of the most commonly used and well-studied topical sensitizers. Although not approved for this indication by the US Food and Drug Administration, the safety and efficacy of diphencyprone in adults with alopecia areata has been evaluated in several studies. However, the use of diphencyprone in children has been the focus of only a limited number of studies. We report the case of a 7 years old patient affected by patchy alopecia resistant to previous treatments. We decide to start therapy with 0,5% of diphencyprone with a satisfy response after 8 months treatment.

Key Message: Treatment of alopecia areata with topical diphencyprone could be a valid option also in selected cases in children.

Title- Utility of Follicular Unit Extraction in Cicatricial Alopecia- Histopathological and Ultrasound Biomicroscopic correlational study

Background- Hair loss results in disturbed self-perception and psychological conflict. Cicatricial alopecia encompasses a diverse group of disorders characterized by the permanent destruction of hair follicles and medical management has limited role.

In 1959, Orentreich described the phenomenon of donor dominance, thus paving the way for hair transplantation. Scattered case reports present the utility of Follicular Unit Extraction in cases of Cicatricial Alopecia.

Material and Methods- After approval from the Institutional Ethics committee, thirty-three patients with cicatricial alopecia in the inactive stage for a period of six-twelve months, were included in the study. A 5cm² recipient area was tattooed. The follicular unit density of the transplanted area was around 20-25FU/cm². Postoperative follow-up was conducted at three, six and nine months. The recipient area density and ultrasound biomicroscopic parameters were assessed at each follow up visit.

Results/Observations- Age of the patients ranged from 18 to 45 (mean-31.5). Statistical significant value of mean survival of grafts at the end of 3months was 56.8%, 68.78% at 6 months and 78.63% at 9 months. Also, excellent repigmentation of the depigmented patches of discoid lupus erythematosus was observed as early as 4months.

In the present study, histopathology variables like epidermal atrophy, fibrosis and inflammatory infiltrate were not found to have any effect on survival of grafts.

Ultrasonography parameters such as epidermal entry echo, full skin thickness and dermal echotexture of the scalp skin was found to be markedly improved on follow up. This suggests that the overall health of the scalp improved post follicular unit extraction.

Conclusion- Follicular Unit Extraction is a good method for treating cicatricial alopecia as the end result is satisfying to both, the patient as well as the doctor.

Limitations- Longer follow up and more studies to shed further light.

Conflict of interest : No conflict of interest

A multifaceted approach to the treatment of non-scarring alopecia using peptide fullerene therapy

Hair and scalp diseases are not only a medical problem but also a social problem. In the structure of dermatological diseases, hair diseases are 4.5% of all skin pathology. Every third inhabitant of the Earth is faced with some kind of hair or scalp problem. 95% of non-scarring alopecia occurs in androgenetic alopecia, 4% - in alopecia areata, and 1% in other forms. The pathogenetic mechanisms of androgenetic, alopecia areata and diffuse alopecia, with all their differences, have several common features. For example, with non-scarring alopecia, there is a marked decrease in the metabolic and mitotic activity of the growth zone cells from the hair follicles, amplifying latent microvasculitis, nutrient deficiency, and exposure to oxidative stress.

The Fullerene Forte JP 100 hair restoration program is aimed at the main aspects of the pathogenesis of these forms of alopecia. Being an innovative result of Japanese scientific and technological research, the Fullerene Forte JP 100 line contains a unique regulatory and biomimetic peptide complex. The peptides in the complex are chosen upon their synergetic effect on hair follicle cells. Apart from the peptide complex the Fullerene Forte JP 100 products contain microelements, vitamins, plant extracts and patented complexes (Photonyl®LS, Capixyl™, Prodew®500, Hyalo-Oligo®) with vasoprotective, anti-inflammatory, regenerative and phytoestrogenic effects aimed to reduce the activity of 5- α -reductase.

All ingredients are encapsulated in nanoliposomes to preserve biological activity and to ensure better penetration into the skin. The fullerene molecule (Nobel prize 1996), which is the basis of the Fullerene Forte JP 100 line, is a powerful antioxidant, antihypoxant, and reparant. It has unique properties aimed at restoring the functional activity of hair follicle cells.

There were 30 patients under observation, 26 women, and 4 men aged 15 to 53 years. Of these, 26 patients were androgenetic (22 women and 4 men), 3 patients with diffuse alopecia (3 women), and 1 patient with alopecia areata. All of them received external therapy with Fullerene Forte JP 100 drugs and a fractional mesotherapy device, and all of them received therapy with these drugs at home. The number of sessions ranged from 15 to 20 times, the frequency of visits was 1 time in 3-7 days. All of them achieved positive dynamics. So among patients with diffuse alopecia hair loss stopped entirely, and hair density increased by 1.8 times per 1 cm², among patients with androgenetic alopecia there was also noted an increase in the density and diameter of hairs by 1 cm², a reduction in the percentage of vellus hair and an increase the speed of hair growth, in a patient with alopecia areata process has entered the stationary phase.

Thus, the use by Fullerene Forte JP 100 drugs promotes stable upward trend in the form of an increase in the total number of hair and their diameter, as well as the speed of their growth, triggers the regeneration of hair follicles and can be used in the complex treatment of non-scarring forms of alopecia.

Halnykina Svitlana, Mukomela Liubov

Comparative characteristics of combined treatment methods for seborrheic dermatitis of the scalp

Dermatology and Cosmetology Clinic "Art Clinique"

Actuality: According to the literature sources, seborrheic dermatitis affects 3-5% of the population, but dandruff as its least severe form is common and is observed in about 15-20% of the population.

Objective: To evaluate combined treatment methods for seborrheic dermatitis: home care in combination with deep cleansing procedures and narrowband phototherapy of the scalp compared to therapeutic shampoo monotherapy.

Patients are advised to use medicinal shampoo, which includes keratolytic substances (salicylic acid 2-5%, urea 10-30%), antifungal (ketoconazole, pyroctone olamine), anti-inflammatory, soothing, moisturizing components.

The procedure of deep cleaning, ie. peeling of the scalp, is aimed at the removal of scales, sebum, styling materials, dirt. It activates blood circulation, promotes oxygenation of the scalp and hair follicles, prepares skin for the penetration of the active substances of drugs.

Phototherapy of the scalp is a narrow wavelength of 311 nm, which gives the maximum amount of therapeutic effect of UV.

22 patients with seborrheic dermatitis were observed, including 14 male and 8 female patients, with average age of 37 years.

The patients were divided into 2 groups. The first one was treated with a course of peelings (5 procedures 1 time per week), a course of phototherapy 311 nm (20 procedures 3 times a week). Patients of the second group used only medical shampoo for dandruff.

As a result of the treatment in the first group, 9 (81.8%) patients had clinical recovery, and 2 (18.2%) had a significant improvement.

In the second group, 3 patients (27.3%) recovered from the condition, 3 patients (27.3%) had a significant improvement, and 4 patients (36.4%) had clinical signs of seborrheic dermatitis.

Conclusion. After treatment using the procedure of deep cleaning of the scalp, narrowband phototherapy 311 nm in combination with therapeutic shampoo, we can conclude that a comprehensive approach to the treatment of seborrheic dermatitis is more effective than monotherapy with shampoo at home. The use of a combined technique makes it possible to achieve stable and long-term remission of seborrheic dermatitis

DIPHENCYPRONE IN ALOPECIA AREATA: A SUCCESSFULL TREATMENT OPTION

M. Cantelli*¹, M. Vastarella¹, P. Nappa¹, M.C. Annunziata¹, A. Patrì¹ and G.Fabbrocini¹

Affiliation:

¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy

*Corresponding author: mariateresacantelli@gmail.com

Background: Alopecia areata is an extremely common non-scarring alopecia of unclear etiology although immunologic, genetic, and environmental factors may play an important role in the development of permanent or temporary hair loss. In the treatment of alopecia areata, no gold standard exists. Many treatment regimens for alopecia areata include topical immunotherapy with diphencyprone. **Observation:** Diphencyprone is one of the most commonly used and well-studied topical sensitizers. It was first synthesized in 1959 and has since been used in the treatment of multiple immune-mediated dermatologic diseases including alopecia areata. Topical sensitizers act as haptens to initiate a delayed-type (type IV) hypersensitivity reaction by binding to an endogenous protein to create a complete antigen. This is clinically manifested as allergic contact dermatitis. We report a case of a 45 years old women with a 10 years history of alopecia areata. The onset of the disease was in a classical patchy alopecia evolving in totalis. The patient was treated before with topical and intramuscular steroids and ciclosporin with a partial hair regrowth. We decided to start topical immunotherapy with 1% diphencyprone twice a week that improve alopecia of almost 85% after one year treatment. The treatment was well tolerated by the patient and she was very satisfied of the clinical results.

Key Message: Treatment of alopecia areata with topical diphencyprone could be a valid option. Though the treatment may have some side effects, in most cases they are tolerable and respond well to treatment.

Short hair disorders in children “ from trichoscopy to therapy “

Wafaa M Ramadan-Egypt

Diagnosis and management of short hair disorders in children is difficult and challenging . Some Egyptian children with loose anagen syndrome, short anagen syndrome, and Hereditary Hypotrichosis simplex , with successful treatment for the first time in the literature for a case of Hereditary hypotrichosis simplex, will be introduced

Facial Papules in Frontal Fibrosing Alopecia: a case report

M. Vastarella¹, M. Cantelli^{*1}, P. Nappa¹, M.C. Annunziata¹, A. Patrì¹ and G.Fabbrocini¹

Affiliation:

¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy

*Corresponding author: marinavastarella@gmail.com

Background:: Frontal fibrosing alopecia (FFA) is a scarring disease in which the hairline recedes, and the eyebrows may be affected. It is typically seen in postmenopausal women, while is far less common in men. Several other clinical features have been associated with the disease, such as facial papules (FP). Although the facial papules were related to the implication of the facial vellus hair follicle, how this discovery alone might result in the formation of clinically evident facial papules in FFA patients had not yet been evaluated.

Observation: Here, we report a case of a 55 years old woman presented with a 24-month history of a band-like area of fibrosing alopecia affecting the frontoparietal scalp. At clinical exam, she presents a recession of the hairline and the involvement of the latest part of the eyebrow. Also, there were small pinkish papules on the forehead. Dermoscopy of the pinkish papules highlighted perifollicular erythema secondary to vellus hair follicle involvement. Trichoscopy showed empty follicles/yellow dots, absence of follicular ostia, mild follicular hyperkeratosis, perifollicular erythema and 'lonely hair'. While the etiology of FFA has remained obscure, the observation of facial papules provides further evidence that these entities may belong to the same spectrum of a lichenoid pattern of follicular inflammation and fibrosis (cicatricial pattern hair loss).

Key Message: We need further study supporting that FFA and facial papules belong to the same spectrum of pattern hair loss with evidence of follicular inflammation and fibrosis (cicatricial pattern hair loss).

SUCCESSFUL TREATMENT OF LICHEN PLANUS PIGMENTOSUS ASSOCIATED WITH FRONTAL FIBROSING ALOPECIA WITH LOW DOSE OF ORAL METHOTREXATE

ALVAREZ PEREZ GABRIELA, MD1*

CAPPETTA EUGENIA, MD2

D ATRI GISELLA, MD3

1 Dermatology-Rheumatology Department, Hospital Interzonal Dr Jose Penna, Bahía Blanca, Buenos Aires, Argentina

2 Dermatology Department, Instituto Universitario CEMIC. Ciudad Autónoma de Buenos Aires. Argentina

3 Grupo MCI, Medicina Capilar Integral, Ciudad Autónoma de Buenos Aires. Argentina

*Corresponding author: gabriela@dermatologiacial.com.ar

1. Background:

Lichen Planus Pigmentosus associated with Frontal Fibrosing Alopecia is not rare. It is important the early diagnosis of both entities to prevent the definitive pigmentation of the skin and the progression of the alopecia.

2. Observation:

A 50-year-old, phototype III (Fitzpatrick) pre-menopausal woman with a history of hypothyroidism presented with erythematous macules on her face that had appeared a few months before. She had been treated for contact dermatitis and rosacea with topical corticosteroids, metronidazole, ivermectin, tacrolimus and oral minocycline. Physical examination revealed frontal scarring alopecia and partial eyebrow alopecia, facial skin colored papules and erythematous macules on her forehead, cheeks and neck. A skin biopsy from the cheek showed an interface dermatitis and dermal melanophages. The facial macules evolved to fixed hyperpigmented lesions. These were interpreted as Lichen planus pigmentosus. Finasteride 2,5 mg/day, topical clobetasol and 5% minoxidil plus scalp triamcinolone infiltrations were indicated associated with low dose methotrexate, topical tacrolimus 0,1 ointment and sunscreen. After 6 months of treatment remission of the facial macules and alopecia stabilization was observed.

3. Key Message:

Lichen planus pigmentosus associated with Frontal fibrosing alopecia is not uncommon.

Initially it is confused with other entities such as rosacea, allergic dermatitis, etc.

The presence of a receding line with loss of vellus hairs on the trichoscopy, facial papules, and eyebrow alopecia is a important guidance to the diagnosis of Frontal Fibrosing Alopecia

The early diagnosis and treatment of both entities prevents the progression of the hiperpigmentation and the alopecia

Low-dose methotrexate is an alternative treatment option to systemic corticosteroids in Lichen Planus Pigmentosus

CO-EXISTENCE OF ALOPECIA AREATA AND ATOPIC DERMATITIS: COULD DUPILUMAB BE THE RIGHT WAY?

M. Cantelli*¹, M. Napolitano², M. Vastarella¹, P. Nappa¹, M.C. Annunziata¹, A. Patri¹ and G.Fabbrocini¹

Affiliation:

¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy

² Department of Medicine and Health Sciences Vincenzo Tiberio, University of Molise, Campobasso, Italy.

*Corresponding author: mariateresacantelli@gmail.com

Background: Alopecia areata and atopic dermatitis are two common skin diseases that can coexist in the same patient, sharing some pathogenetic mechanisms such as the overexpression of interleukin 4 (IL4) and interleukin 13 (IL13).

Observation:

Dupilumab, a human monoclonal antibody against interleukin-4 receptor α , acts by inhibiting the signaling of interleukin-4 and interleukin-13, both of which are type 2 cytokines that may be important drivers of allergic or atopic diseases such as atopic dermatitis. Prior reports have described new alopecia areata, flaring of prior alopecia areata, as well as improvement or resolution of alopecia areata in patients treated with dupilumab.

We report five patients (3 woman and 2 men, with a middle age of 35 y.o.) with concomitant alopecia areata and atopic dermatitis.

Key Message: Although the mechanism of action of dupilumab could be a promising therapeutic strategy for both the disease the improvement of these pathology is very heterogeneous. Further studies are needed to understand the variability of clinical response.

ALOPECIA AREATA OF EYELASHES: CASE REPORT AND LITERATURE REVIEW

Ana Maria Benvegnú*1, Bruna Duque Estrada1

1Institute of Dermatology Prof. Rubem David Azulay, Santa Casa de Misericórdia of Rio de Janeiro, RJ, Brazil.

*anabenvegnu@yahoo.com.br

Background

Female patient, 4 years old, healthy. She presented alopecia in the upper left eyelashes, with an evolution of around 30 days (Image 1). Evaluation of the scalp and body showed no signs of alopecia and laboratory tests were within normal limits. The treatment chosen was Tacrolimus 0.03% ointment twice a day and Quercetin 500mg / day orally. When reassessed 30 days later, the patient had no signs of disease progression. The patient had complete eyelash repilation after 6 months of treatment, when the medications were discontinued. When reassessed after 1 year, the patient showed no signs of disease recurrence.

Image 1. Before (top) and after (bottom) the treatment.

Observation

Alopecia areata (AA) is a non-healing autoimmune disease. Its classification is in plaques, total and universal. Plaques or exclusive accommodation in areas other than the scalp occur in about 10% of cases. Thus, cases of alopecia in the eyelashes without other areas of alopecia is not common and few reports are found in the literature. Description of treatment with topical immunomodulators has not been found in the literature. There have been reports of treatment with topical hydrocortisone, minipulse oral betamethasone, topical betamethasone, latanoprost, bimatoprost, travoprost, difenciprone, antraline, ruxolitinib and tofacitinib.

Key Message

Satisfactory results of the treatment with topical immunomodulator in the reported case make this medication a therapeutic option for alopecia areata in the eyelashes area.

Università degli Studi di Roma "La Sapienza"

Dipartimento di Scienze Cliniche Internistiche Anestesiologiche e Cardiovascolari

Dir Prof. C. Gaudio

UOC di Dermatologia

Centro di fisiopatologia degli annessi cutanei

Responsabile Prof. A. Rossi

A new therapeutic approach in the fibrosis' treatment in cicatricial alopecia: the Skin patting

M.C. Fortuna G. Caro M. Carlesimo A. Rossi

Cicatricial alopecia is where there is a permanent destruction of hair follicles, accompanied by irreversible hair loss and where histology indicates that hair follicles have been replaced by fibrous tissue. Several classification these propose of scarring alopecia of which the most interesting is the primary cicatricial alopecias. The main objective of treatment is to prevent the progression of cicatricial alopecia, because once it has spread the surgery is unique option. It's worth remembering that cicatricial alopecias begin as a non-scarring process that evolves a scarring one with time. Unfortunately often the fibrosis is already present, therefore a medical therapeutic approach are unuseful. In these cases the unique treatment that has been proved to be efficacy is the PRP with two purpose, first of all to stimulate the hair follicles, eventually still alive, and if it's not possible, to regenerate the skin scalp, therefore preparing it for a surgical approach. Herein the authors reported the good clinical response of the use of the skin patting, which is a methodic that combined physical therapy and biostimulation.

HAIR HYPOPIGMENTATION, SECONDARY TO PAZOPANIB A MULTIKINASE INHIBITOR

A.De-Villafranca D.1 M.Vega G. 2

1 Hospital Médica Sur, Clínica Derma Integral, Ciudad de México.

2 Instituto Nacional de Cancerología, departamento de dermatología, Ciudad de México

*Corresponding author: andreadevillafranca@gmail.com

Background:

Pazopanib is a targeted therapy, multikinase inhibitor (including VEGF & PDGF receptor tyrosine kinases) some of which are implicated in tumor growth, angiogenesis, and metastasis. The most common indications are advanced renal cell carcinoma, soft tissue sarcomas and ovarian cancer.

The c-kit signalling pathway is primed by the ligand stem cell factor (SCF), and is involved in melanogenesis, and in hair pigmentation. SCF/c-kit interaction during early anagen is very important for normal pigment production.

38% of patients that take pasopanib presented hair depigmentation, being one of the most frequent adverse events. The hair depigmentation due to ckit inhibitors is reversible after treatment discontinuation, so these agents determine a temporary dysfunction of melanocytes.

Hypopigmentation of hair color has been reported with other drugs like sunitinib, chloroquine, IFN- α , cyclosporine A and etretinate.

Observation:

Case report of a 30 year old Mexican patient diagnosed with mediastinal paraganglioma.

Initially she was treated with surgery and radiotherapy, 2 years later she attended for uncontrolled blood pressure, so she was studied for disease recurrence being positive with bone metastases.

The patient started chemotherapy treatment with pazopanib. 2 months after the first dose, she presented hypopigmentation of hair and eyebrows. At follow-up appointments the changes in pigmentation were evident, presenting the flag sign, band distributed hypopigmentation.

3 months after the last chemotherapy dose was administrated, she only had some areas of poliosis.

Key Message:

Hair hypopigmentation, Pazopanib, multikinase inhibitor, chemotherapy agents adverse effects

ASSESSING LABORATORY WORK UP OF ALOPECIA AMONG PATIENTS OF VARYING SKIN TYPES: A SINGLE-CENTER RETROSPECTIVE CHART REVIEW

Nkemjika Ugonabo MD, MPH1*; Efe Kakpovbia BA1, Oluwatobi Ogbechie-Godec MD, MBA2, Kristen Lo Sicco MD, FAAD1, Jerry Shapiro MD, FAAD1

1The Ronald O. Perelman Department of Dermatology at New York University, USA

2APDerm/ Mystic Valley Dermatology Associates, USA

*Corresponding author: n.ugonabo@gmail.com

Background, Aims and Objectives, Methods, Results, Conclusions.

1. Background: (11-point boldface)

- Hair loss, or alopecia, is a common dermatologic problem in the general population. The evaluation for alopecia includes a thorough history and review of systems, physical examination and laboratory evaluation, with biopsy being the standard for unknown diagnoses or suspected scarring alopecia.
- Laboratory tests ordered may include complete blood count (CBC), thyroid stimulating hormone (TSH), thyroid antibodies, ferritin, iron panel, vitamin D (25-hydroxy), or zinc. However, evidence supporting the utility of these laboratory tests has been mixed, most notably for ferritin.

2. Aims and Objectives:

- Little information exists on how laboratory test results contribute to the ultimate diagnosis of alopecia. The purpose of this study is to whether lab tests influence the diagnosis or treatment for alopecia and whether there was any benefit (i.e., hair growth) with the supplementation of or intervention upon patient with abnormal lab results.

3. Methods:

- A retrospective, single-site chart review was performed of patients with the diagnosis of alopecia who were seen at NYU Faculty Group Hair Clinic Practice between January 1, 2008-September 1, 2018 for at least two visits and had laboratory tests ordered at the first visit along with folliscope measurements .
- Patient charts were identified by searching EPIC and SRS, the institution's current and previous electronic medical record system respectively.
- The study is collecting information on: skin type, ethnicity, diagnosis, procedures performed (including scalp biopsy with corresponding results), laboratory tests ordered, laboratory test results, and folliscope parameters which include hair density and caliber.

- All data is being stored behind NYU institutional firewall in REDCap, a HIPAA compliant and password protected electronic database.

4. Results:

- 1,605 patient charts were reviewed
- 61 patients thus far met the inclusion criteria specified and were included in detailed review.
- The most common alopecia diagnosis was androgenetic alopecia (52.5%) followed by concomitant telogen effluvium and androgenetic alopecia (27.9%) and telogen effluvium (13.1%).
- Of the 61 patients, 10 had abnormal labs below NYU designated normal values (5 ferritin, 2 vitamin D, 1 zinc, 1 zinc and vitamin D, 1 ferritin and zinc). All TSH values were within normal limits.
- Of these 10 patients with abnormal values, 4 were supplemented.
- Folliscope density measurements taken at initial visit and then four months later, showed an improvement of an average of 28.25 hairs/cm² in patients who were supplemented, compared to 7 hairs/cm² in patients who were not supplemented ($p=0.08$).

5. Conclusions:

- Laboratory abnormalities were found in 16.9% of our cohort.
- Ferritin was the most common lab abnormality.
- Patient's who were supplemented had greater improvement in hair density compared to those not supplemented, with a confidence of 92%.
- Additional studies with a larger cohort are needed to further examine the effect of laboratory testing and vitamin and mineral supplementation on hair growth.
- Next steps include: Continue chart review and data collection and to perform additional statistics to control for other medications prescribed by the provider (e.g., minoxidil).

The effect on the quality of life of using prosthesis in chemotherapy-induced alopecia: an open-label study

M. Vastarella¹, M. Cantelli¹, P. Nappa¹, M.C. Annunziata¹, A. Patri¹ and G. Fabbrocini¹

Affiliation:

¹Department of Clinical Medicine and Surgery, Section of Dermatology, University of Naples Federico II, Napoli, Italy

*Corresponding author: marinavastarella@gmail.com

Background:

Chemotherapy-induced alopecia (CIA) is probably one of the most shocking events for cancer patients. It negatively affects body image, sexuality and self-esteem, so that up to 8% of patients decide to refuse chemotherapy. Although in most cases when cancer therapy is interrupted, hair regrowth is observed, in some cases alopecia appears to be permanent, especially during aggressive, high-dose chemotherapy treatments. Concerning chemotherapy-induced alopecia, we need additional therapeutic strategies, such as the activation of aesthetic programs to help cancer patients and psychosocial support. The use of a fixed prosthesis could be an effective method to counter the psychological discomfort caused by chemotherapy by increasing compliance to continue treatment.

2. Aims and Objectives: we investigated the effect on the quality of life of the use of prosthesis in ten patients affected by chemotherapy-induced alopecia using dermatology life quality index (DLQI).

3. Methods: Ten patients with chemotherapy-induced alopecia were enrolled from June 2017 to November 2019 at University of Naples Federico II, Dermatology Division, after informed consent had been obtained. Their ages ranged 25-60 years (median 49.1±10.54 y.o.). We have given patients the opportunity to get fixed, perfectly biocompatible prostheses made from human hair. The prosthesis must not be removed when the patient plays sports or goes to the pool, making the patient's life as close to normal as possible. Indeed the prosthesis has to be removed only one time a month for sanitation. Perceived DLQI was measured at T0 after the application of the prosthesis T1 and after three months of use T2. Tolerability of the prosthesis was evaluated through an assessment questionnaire.

4. Results: The results showed that the total DLQI score significantly decreased from (20.5±2.06) at T0 to (2.6±0.5) at T2, $p < 0.0001$. The most significant impact has been achieved on interpersonal relationships and in particular on the sexual sphere. The product was perfectly tolerated without any adverse event reported.

5. Conclusions: The use of a fixed biocompatible prosthesis could be an effective method to counter the psychological discomfort caused by chemotherapy by increasing compliance to continue treatment. Prosthetics give continuity to personal body image: in this way, patients preserve their appearance, as nothing seems to have changed. By improving the patient's quality of life, it is possible to face the fight against the disease with more confidence.

EARLY DIAGNOSIS OF LICHEN PLANUS PILARE: FROM THE CLINIC TO TRICHOSCOPY TO MICROBIOTA.

1st F. Rinaldi,¹ 2nd A. Trink¹ and 3rd D. Pinto^{1,*}

¹Human Microbiome Advanced project, HMAP, Giuliani SpA

*Corresponding author: dpinto@giulianipharma.com

1. Background:

Lichen planopilaris (LPP), a morphological variant of Lichen Planus affecting the scalp, is a rare, difficult-to-treat, chronic, inflammatory skin condition resulting in cicatricial alopecia, which can be eventually permanently irreversible. Since LPP manifestations evolve with the disease its diagnosis is not simple. More recently the involvement of microbiota inhabiting the scalp in LPP subjects has been reported.

2. Observations:

Ten subjects from our clinic have been diagnosed with LPP, apparently invisible and following a previous wrong diagnosis, by means of dermatoscopic analysis coupled with the histopathological examination and microbial dysbiosis evaluation.

3. Key message:

Trichoscopy and histopathological analysis are decisive tools for LPP diagnosis together with evidence of microbial dysbiosis on the scalp.

TRACTION ALOPECIA AMONG MEXICAN POPULATION

Author: Martinez H1. Alvarado A2, Balbuena E.3, Barron L4.

1.- Mexican Trichology society, Mexico

2.- Mexican trichology society, Mexico

3.- Puebla Dermatology academy, Mexico

4.- Puebla Dermatology academy, Mexico

Corresponding author:: Hugo V. Martinez Suarez

E-mail address: dermahugo@yahoo.com.mx

Background

It is called traction alopecia to hair loss caused by continuous tensioning, strong and chronic of the hair. It is frequently observed in women and is very common in those that for work situations, as well as racial and cultural behaviors perform a hairstyle, tense up the hair fiber in all its extension prolonging the mechanical trauma. Besides, it is known that use of extensions, dreadlocks and braids as well as ponytails are responsible for this trichosis.

Objective

Show that in Mexican population, TA is more frequent of the reported as well as its sequels.

Methodology

We present a study with 50 Mexican women in an age range from 15 to 50 years old, who adopted a hairstyle that resulted in TA.

Diagnosis was made through clinical findings, tricoscopic study and in some cases histopathological study, the goal was to observe possible changes in the entire hair structure.

We excluded those patients with other hair disorders or that they did not count with inclusion criteria for this study.

Results

The final result was to show TA is not only a hair disorder characterized by hair loss in patch or marginal form, also, we want to prevent the development of scarring alopecia in which hair damage is irreversible.

FOLLICULAR DEMISE IN FRONTAL FIBROSING ALOPECIA AND LICHEN PLANOPILARIS REVEALS A STROMAL ETIOLOGY RATHER THAN APPENDAGEAL MALFUNCTION

Kumar Sukhdeo MD, PhD*

1 Pilaris Dermatology, New York, NY USA

*kumar@pilaris.com

Original Study

Background: Frontal fibrosing alopecia (FFA) and lichen planopilaris (LPP) are two similar forms of cicatricial alopecia with unknown etiologies. Several theories posit intrinsic follicular defects leading to inflammation, scarring, and alopecia.

Aims and Objectives: The purpose of this study was to derive a new concept of FFA/LPP pathogenesis that reconciles observational study and clinical experience.

Methods: A literature search from 1960 to 2020 was conducted for reports of cicatricial alopecia outcomes, including results of FFA/LPP hair transplantation.

Results: Transplantation of hair follicles from unaffected to affected areas in FFA/LPP patients, even after an extended period of quiescence, risks disease reactivation. This phenomenon of 'follicular demise' is in contrast to the Orentreich model of donor dominance, exploited in androgenic alopecia hair grafting whereby transplanted follicle behavior is maintained in the recipient anatomic location. Recent evidence from FFA/LPP patients with repeated hair grafting shows initial follicle viability but quiescence often exits to cause inflammation akin to the original manifestation. These iatrogenic findings inform the natural history of FFA/LPP.

Conclusion: A revised model of FFA/LPP is proposed that posits a perturbed stroma rather than follicular defects (eg sebaceous gland malfunction) in disease pathogenesis. FFA/LPP could then be reconsidered as connective tissue (CT) diseases with the pilosebaceous unit as an unfortunate bystander within inflammatory cytological remodeling. This hypothesis reconciles the parallel clinical signs, symptoms, and treatment modalities shared between FFA/LPP and other CT disorders.

DEPRESSION OF THE FRONTAL VEINS AFTER INTRALESIONAL CORTICOSTEROID THERAPY FOR FRONTAL FIBROSING ALOPECIA

Maria Fernanda Reis Gavazzoni Dias¹, Jhoana Patricia Jojoa Chiran^{1*}, Ivonne Danessy Rodriguez Hernandez¹

¹Universidade Federal Fluminense, Hospital Universitario Antonio Pedro, Niterói, Brazil.

*Corresponding author: juanita0788@gmail.com

Background

Frontal vein depression (DVF) in patients diagnosed with Frontal Fibrosing Alopecia (AFF) was described as a clinical sign for the first time in 2015 by Vano-Galván¹, a second report emerging in 2018 by González-Guerra², considered in recent literature as an additional clinical element for the diagnosis of this disease^{3,4,5}.

Observation

We describe the case of a 73-year-old female patient diagnosed with AFF, with no other significant comorbidities. On Physical examination, she presented a depression located in the central part of the frontal region (Fig 1), posterior to the use of intralesional triamcinolone hexacetonide at the recommended doses of 2.5 mg / ml, every 8 weeks^{4,6}, which was why it was discontinued. At approximately 3 months, after suspension of the intralesional corticosteroid, she presented spontaneous improvement of the atrophic area (Fig 2).

Key Message

DVF is considered a sign of AFF in patients with and without the use of previous intralesional corticosteroids and its pathogenesis is unknown. Intralesional corticosteroids could contribute to linear atrophy at injection sites; this hypothesis is based on the diffusion of corticosteroids in the sites of the lymphatic vessels and the resolution of the atrophy after the suspension of treatment⁷, as in our case. We emphasize the importance of recognition of this sign in these patients and their documentation, in order to define its role in addressing this pathology.

ATRICHIA WITH PAPULAR LESIONS: A RARE CAUSE OF IRREVERSIBLE ALOPECIA

Khammouma Ferdaous 1*, Litaïem Nouredine 2, Lakhal Mariam 2, Yakoubi Jihed 2, Becha Takoua 2

1Dermatology department, Charles Nicolle Hospital Tunis, Tunisia

2 Dermatology department, Charles Nicolle Hospital Tunis, Tunisia

ferdaouskhammouma@gmail.com

1. Background:

Atrichia with papular lesions (APL) is a rare autosomal recessive disease characterized by a total irreversible hair loss on the scalp, eyebrows, eyelashes, axillary and pubic hair soon after birth. Later, patients develop papules and keratin-filled cysts over extensive areas of the body. Mutations in the human hairless (HR) gene have been implicated in the pathogenesis of this disorder.

2. Observation:

A 2-year-old boy born to first degree consanguineous marriage, presenting with a history of sparse hair since birth, with family history of similar involvement. Clinical examination revealed partial alopecia of the scalp, eyebrows and eyelashes associated with tiny monomorphic keratinous papules over the scalp and upper back. He is otherwise considered healthy. Laboratory investigations and radiographs of wrists were normal. Since genetic testing was not available in our hospital, a skin biopsy from the scalp was performed revealing keratin-containing cysts in the dermis and the absence of hair follicles. Based on the patient's history, clinical examination and histopathology, a diagnosis of APL was made.

3. Key Message:

APL is a rare genodermatosis often clinically confused with other forms of alopecia. Clinical findings, with demonstration of keratinous cysts from the papular lesions on histopathology remains the mainstay of diagnosis. Consanguinity is an important clue in the diagnosis of APL. Detection of HR mutations is the gold standard for the diagnosis.

DERMOSCOPY PATTERNS OF ALOPECIA RESULTING FROM ACUTE AND CHRONIC LUPUS ERYTHEMATOSUS

1st J.Yacoubi,1(*) 2nd N.Litaiem2 , 3rd Chaker H.2, K.Ben Youness2, T.Bacha2.

1Dermatology Department, Charles Nicolle Hospital, Tunis,Tunisia

2Dermatolology Department, Charles Nicolle Hospital, Tunis,Tunisia

(*)Corresponding author: E-mail jj.yacoubi@gmail.com

1. Background:

Trichoscopy is a new and valuable tool providing Surface and subsurface microscopic views of scalp and hair. Recently, this method has proven extremely useful in aiding the diagnosis and follow-up of alopecias. However, reports of trichoscopic features of alopecia in lupus

are mainly focused on the discoid form.

2. Aims and Objectives:

This study aims to summarize the tricoscopic patterns of alopecia in acute and chronic lupus erythematosus.

3. Methods:

A descriptive study was conducted in which 7 patients with alopecia resulting from Lupus were selected. The patients were evaluated using conventional dermoscopy (DermLite 3®), performed independently by two different examiners

4. Results:

Incomplete alopecia was common in acute lupus erythematosus (ALE) alopecia patches, while chronic lupus ertythematosus (CLE) patches exhibited complete alopecia. In the patients with chronic lupus erythematosus, the principal findings were white patches, branching capillaries, and black dots.

Circular and broken hair were more common in acute lupus erythematosus . During follow-up, increased vellus hair was the earliest feature that emerged after treatment both in acute and chronic lupus erythematosus.

5. Conclusions:

Trichoscpy is an asset for the clinical evaluation of the scalp in cases of Alopecia resulting from Lupus, and it may reveal new features. Local vasculitis may be involved in the pathogenesis of alopecia in CLE.

FOLLICULITIS KELOIDALIS NUCHAE: CLINICAL AND TRICHOSCOPIC STUDY

N. Daadaa^{1*}, N. Litaïem¹, A. Chamli¹, M. Karray¹, T. Becha¹, M. Jones¹, F. Zeglaoui¹

¹ Dermatology Department, Charles Nicolle Hospital, Tunis, Tunisia

*Corresponding author: daadaanajla1990@gmail.com

1. Background:

Folliculitis keloidalis nuchae (FKN) is a chronic scarring folliculitis at the back of the neck and occiput. A very few studies have tried to elucidate its dermoscopic features.

2. Aims and Objectives:

To evaluate clinical and dermoscopic patterns of FKN.

3. Methods:

We conducted a retrospective study in patients with FKN over a period of 5 years (2015-2019) at the Dermatology department of Charles Nicolle Hospital of Tunis.

4. Results:

Eight patients were included (seven male and one female). The mean age of the patients was 40 (24-56) years and 50 % were over 40 years of age. The mean disease duration was 33 months. Five patients had severe acne, two had pseudofolliculitis barbae and one patient complained about hirsutism and amenorrhea. Single keloidal plaque causing ciatricial alopecia was seen in five patients while multiple erythematous follicular papules were noted in three patients. Dermoscopy performed in four patients, revealed black dots (BD) in one, white halo surrounding hair follicule (WH) in one, tufted hairs (TH) in three, perifolliculair pustules (PP) in three, dilated follicular ostia (DF) in four and dots vessels in four patients.

5. Conclusions:

Our study is consistent with the recognised overwhelming male predominance in FKN but it is particular by a late disease onset. Trichoscopy of early lesions shows PP, BD, and WH corresponding to perifollicular fibrosis. In advanced stage of FKN, dermoscopy reveals the presence of TH and loss of follicular ostia. DF are most common at a late stage of the disease.

ALOPECIA AREATA MIMICKING TELOGEN EFFLUVIUM IN A LUPUS PATIENT

Malek Ben Slimane,¹ Asmahane Souissi^{1 *}, Oumayma Magdoud ¹, Imed Ben Ghorbel², Mourad Mokni¹

¹Department of dermatology, hospital of rabta, tunisia

²Department of internal medicine, hospital of rabta, tunisia

*dr.asmahanesouissi@gmail.com

Background: Outbreaks of lupus may be accompanied by current ongoing hair loss corresponding to telogen effluvium (TE). We report herein a case of diffuse alopecia areata (AA) mimicking a TE in a lupus patient.

Observation: A 45-year-old woman with a history of systemic lupus erythematosus (SLE) was referred to our outpatient department for diffuse hair loss concomitant with an outbreak of her illness with a diagnosis of TE. On physical examination, we found a malar rash with diffuse thinning and hair fragility. Trichoscopic examination revealed black and yellow dots, yellow dots centered by black dots, pigtail hairs and angulated hairs. Based on these findings, diffuse hair loss was diagnosed as diffuse AA. Intralesional corticosteroid injection was initiated and complete hair regrowth was observed.

Key message: Diffuse AA is often misdiagnosed as TE. Trichoscopy is an indispensable tool for the diagnosis of hair loss disorders. The most common trichoscopic features of AA are yellow dots with an abundant amount and regular distribution, black dots and pigtail hairs. Thus, trichoscopy makes it easy to differentiate between diffuse alopecia related to TE or AA. This differentiation is pivotal as the treatment strategy is distinct. Khalaf K et al have recently established the coexistence between SLE and AA. They concluded that the association increased consistently with age and is stronger among female patients. The molecular mechanism underlying this association has yet to be fully established (1).

1- Kridin K¹, Shalom G², Comaneshter D³, Cohen AD^{2,3}. Is there an association between alopecia areata and systemic lupus erythematosus? A population-based study. *Immunol Res.* 2020 Jan.

HAIR DEFECTS ASSOCIATED WITH PILI TORTI

A. Chamli*, N. Litaïem, M. Karray, F. Khammouma, T. Bacha, F. Zeglaoui

Department of dermatology, Charles Nicolle Hospital, Tunis, Tunisia

*A.Chamli: amal.fmt@gmail.com

1. Background:

Pili torti (PT) is a very rare hair disorder. It was first described in 1966 by Landois. This hair abnormality is defined by flattened hair shafts which are twisted at irregular intervals. Although PT can be isolated, it may be associated with inherited diseases in autosomal dominant or autosomal recessive or acquired. Up to date no cases of PT was associated with tinea capitis, herein we report three cases.

2. Aims and Objectives:

Our study aimed to identify scalp hair disorders associated with PT.

3. Methods:

We have carried out a retrospective study in our department of dermatology between 2016 and 2019. We studied all trichoscopic findings of scalp hair disorders searching PT.

4. Results:

Nine patients were included. The average age was 15 years (7-35 years). It was 5 males and 4 females. We found PT in *Microsporum tinea capitis* in 2 cases, *Trichophyton tinea capitis*, kerion, alopecia areata, folliculitis decalvans, central centrifugal cicatricial alopecia of vertex, Menkes syndrome, and inherited epidermolysis bullosa in respectively one case. PT was diffuse in Menkes syndrome and epidermolysis bullosa and localized in the other cases.

5. Conclusions:

In our study PT was associated with 3 cases of tinea capitis. To the best of our knowledge, these are the first cases described in the literature. Besides, in our series, PT was associated with acquired conditions as kerion, cicatricial alopecia, and alopecia areata and congenital defects as Menkes syndrome and inherited epidermolysis bullosa.

A RARE ASSOCIATION OF WOOLLY HAIR NEVUS AND EXTENSIVE EPIDERMAL NEVUS

K. Ben Younes^{1*}, M. Jones ¹, H. Chaker ¹, N. Litaïem ¹ and F. Zeglaoui ¹

¹Department of Dermatology, Charles Nicolle Hospital, Tunis, Tunisia

*Corresponding author: Khaoula Ben younes, Department of Dermatology, Charles Nicolle Hospital, Tel: 0021699535220, Email: b-khaoula@hotmail.com

1. Background:

Woolly hair nevus is a rare condition defined by a circumscribed area of curly, fine and hypopigmented hair. We report a new case associated with an extensive epidermal nevus.

2. Observation:

A 2-year-old Tunisian boy presented with multiple brown plaques of the trunk and extremities that tend to follow linear patterns on the skin as "lines of Blaschko". The diagnosis of an extensive epidermal nevus was rendered. Examination of hair and scalp revealed a woolly hair nevus with multiple well-circumscribed patch of kinky, curly and light blonde hair. Physical examination, biology and imaging were normal.

3. Key Message:

There are three types of woolly hair nevus: type 1 is an isolated form; type 2 is associated with an epidermal nevus (this reported case) and type 3 which is an acquired form of adults. Trichoscopy shows a "crawling snake" appearance, a kinking of the hair shaft, and an irregularity of shaft diameter. There is no effective treatment. In the second type, further study is required to rule out ophthalmologic and neurologic abnormalities.

A CONFUSING DISSECTING CELLULITIS OF THE SCALP

CHAKER H1,* , LITAIE M N1, BEN YOUNES K1, DAADAA N1, BECHA T1, JONES M1, ZEGLAOUI F1

1Dermatology Department, Charles Nicolle Hospital, Tunis, Tunisia

*Corresponding author: helaresidanat90@gmail.com

1. Background:

Dissecting cellulitis of the scalp is a rare chronic inflammatory scarring alopecia. Herein, we report one confusing case.

2. Observation:

A 20-year-old man presented to our department with a 1-year history of persistent, painful inflammatory lesions on the scalp with associated alopecia. According to the patient's report, multiple courses of oral antibiotics had failed to heal the lesions. Physical examination revealed multiple, confluent, fluctuant, boggy nodules on the scalp essentially on the occipital region with pustules and overlying alopecic patches. A remarkable element was the presence of a fluctuating oblong swelling of the right aspect of the neck appearing in continuity with the lesions of the scalp. Dissecting cellulitis of the scalp was suspected but the lesion of the neck was confusing. Tomodensitometry was performed showing multiple heterogeneous intradermal formations of the scalp extended to the upper right cervical region without signs of vascular malformation. The puncture of the cervical lesion found a viscous citrine yellow liquid with cytological, bacteriological and parasitological negative tests. Diagnosis of dissecting cellulitis of the scalp with cervical extension was made. Improvement was obtained with 10 mg/day of isotretinoin.

3. Key Message:

We report an original case of dissecting cellulitis of the scalp, particular by a cervical extension of the lesions which, to our knowledge, has not been previously reported in the literature.

A RARE ASSOCIATION OF PILI MULTIGEMINI AND KERATOSIS PILARIS

Kazandjieva J.1,3*, Yaneva M.1,2, Beshanska-Pedersen B.1, Hitova M.1 and Tsankov N.1,2

1Euroderma Clinic, Sofia, Bulgaria

2 Department of Dermatology and venerology, Acibadem City Clinic Tokuda hospital- Sofia, Bulgaria

3 Department of Dermatology and venerology, Medical University- Sofia, Bulgaria

*janaderm@abv.bg

Background:

Pili multigemini is an unusual condition of several hair shafts arising from a single follicle and perifollicular erythema. Each hair fiber has its own inner root sheath but all the hairs are surrounded by one common outer sheath. Usually noticed on the beard of adult men and scalp of children. Keratosis pilaris is a common genetic skin condition, characterized by plugged with keratin hair follicles, perifollicular erythema and coiled hairs.

Observation:

A 34-year old male presented with complaints of skin irritation on the back. Objectively two patches, consisted of erythematous rough papules, were seen symmetrically on the back. Dermoscopic evaluation revealed the presence of keratotic plugs, perifollicular erythema, scaling, and coiled hair. Besides the described picture of keratosis pilaris, multiple hairs (2,3 or 4) emerging from the same follicular orifice were observed. The emerging hairs were with difference in their length, but same in thickness. The presence of no primary hair was noticed. This unusual hair abnormality is known as pili multigemini. Further dermoscopic examination revealed the presence of pili multigemini on the skin of the abdomen and the chest of the patient.

Key Message:

This is a case of a rare condition – pili multigemini, associated with keratosis pilaris on untypical body locations. Trichoscopy, based on dermoscopy allows noninvasive diagnosis of hair and scalp diseases without histological examination of a skin sample.

SCALP THREADING, A NEW TREATMENT OPTION FOR ANDROGENETIC ALOPECIA

Dr Elena Arsova, Serbia

dr.arsovaelena@gmail.com

1. Background: Patients nowadays seek treatment, not only to prevent the existing hair loss but more so to regain new hair with good thickness and density. Cochrane review reports that the efficacy of finasteride and minoxidil for AGA varies between 40% and 60%, which implies that a significant number of patients go bald despite therapy.

New treatment modalities, like Scalp Threading, Autologous stem cells, Cu-peptides, have beneficial role in hair regrowth.

2. Observation: The dialog between mesenchymal and epithelial compartment of the hair follicle is essential for maintaining the normal hair growth, and is performed through signalling pathways and molecules. The Wnt pathway is considered to be the master regulator of hair growth and hair follicle cycling. In AGA, DHT inhibits hair growth by interfering with the Wnt pathway which results in arrest of the cells proliferation and differentiations, and seize of hair growth.

3. Key Message: Scalp Threading is the novel treatment that stimulates the hair follicle cells proliferation, extends the anagen phase of hair growth and upregulates the growth factors.

A single application of threads results in hair growth comparable to that achieved with consecutive applications of minoxidil. Considering its long-lasting and proliferating potentials, Scalp Threading can be considered a good treatment option for patients with AGA.

The role of gut microbiota in Alopecia Areata patients

Giuseppina Caiazza¹, Melania Parisi¹, Maria Antonietta Luciano¹, Maria Quaranta¹, Gabriella Fabbrocini¹

¹ Department of Clinical Medicine and Surgery, University of Naples Federico II, Italy

Alopecia Areata (AA) is one of the most common autoimmune diseases (AID) with a reported lifetime risk of 2% and a prevalence of 0.1–0.2%. AA equally affects men and women and currently there are no approved medicines or effective treatment options for most AA patients, leaving a vast unmet medical need. The resolution of the ongoing inflammation in and around the hair follicles is defective in AA patients as compared to healthy individuals.

Although genetics plays a key role in the pathogenesis of this condition functional studies have also underlined a possible role played by external environmental factors in triggering AA. More interesting, clinical observations have highlighted an increased number of AIDs patients with altered gut permeability. Therefore, the aim of this study was to characterize and compare the intestinal microbiota of healthy controls and AA patients to reveal the presence of a specific disease phenotype. In addition, the expression of inflammatory markers such as IL-33 and mTOR, was analysed in AA patients in inflamed and not inflamed skin and correlate with intestinal microbiota composition and permeability. Our results highlighted an increase of intestinal permeability in patients with active AA as compared to healthy volunteers and a significant increase of mTOR expression in AA patients. Taken together, these results support the presence of a possible link among an altered microbiota composition (intestinal dysbiosis), an altered intestinal permeability and a dysregulated inflammatory response in the AA onset.

FACIAL LESIONS IN A PATIENT WITH FRONTAL FIBROSING ALOPECIA. CASE REPORT.

Corball Melisa ^{1 *}, Bosio Bonet Magdalena ², Ruiz Lascano Alejandro ³

¹ MD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina.

² MD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina

³ MD, PhD, Department of Dermatology, Hospital Privado Universitario de Córdoba. Argentina.

Corresponding author: melisacorball@gmail.com

1. Background:

We describe a patient with multiple facial lesions and frontal fibrosing alopecia (FFA). We highlight the hyperpigmented macules in reticular pattern, which were described in the literature, and to the best of our knowledge, these are novel findings.

2. Observation:

An 48-year-old postmenopausal woman with subclinical hypothyroidism, consulted for a four-year history of hair loss of the eyebrows and upper limbs and progressive lesions in her face.

At the physical examination, she presented alopecia of eyebrows and upper limbs, and a slight hairline recession, grade I. The trichoscopy of the scalp revealed absence of vellus hairs and follicular openings, perifollicular erythema and perifollicular scale.

She presented diverse facial lesions: multiples papules over the temples, cheek and chin, glabellar red dots, diffuse erythema, and brown perifollicular macules, with a target-like pattern over facial papules, more evident on the dermoscopy image.

Histologic evaluation of a cheek showed destruction of vellus hair follicle and interfollicular liquenoid infiltrate with melanophages and pigmentary incontinence.

We initiated treatment with topic tacrolimus, clobetasol, minoxidil, and oral finasteride, and retinoids for her facial papules. Currently, the patient has resolved (partially) her facial lesions and stabilized her alopecia, continuing under medical controls.

3. Key Message:

We present a patient with FFA and multiple facial lesions, with an incipient involvement of follicular units of the scalp. We highlight the importance of the examination and recognition of facial lesions in early stages of FFA, in order to initiate an opportune and suitable treatment to preserve the follicular unit. We highlighy the presence of hyperpigmented macules in reticular or target-like pattern, which are novel findings.

A SEVERE CASE OF LICHEN PLANOPILARIS MIMICKING A KERATOSIS FOLLICULARIS SPINULOSA DECALVANS

F.El Hadadi^{1*}, L.Mezni¹, K.Znati², M.Meziane¹, N.Ismaili¹, L.Benzekri¹, K.Senouci¹.

¹Department of Dermatology, Mohammed V University in Rabat, Ibn Sina University Hospital, Rabat, Morocco.

²Department of Pathology, Mohammed V University in Rabat, Ibn Sina University Hospital, Rabat, Morocco.

*Corresponding author: farahelhadadi1234@gmail.com

1. Background:

The association of spinulose papules and scarring alopecia can be seen in many disorders such as: Graham-Little-Piccardi-Lasseur syndrome, keratosis follicularis spinulosa decalvans and lichen planopilaris.

2. Observation:

A 26-year-old female patient born from a nonconsanguineous marriage, presented a rough keratotic papules all over the body since childhood and loss of hair over the scalp and eyebrows 4 years ago. She was complaining about itchy skin, thick eyelashes, and a painful scalp. The dermatological examination revealed multiple, follicular, tiny, erythematous, keratotic papules over the arms, buttocks and the back suggesting a keratosis pilaris, a well-defined reddish plaque of 7*8cm, covering entire vertex of scalp with pustules. Trichoscopy revealed perifollicular white scaling, erythema, pustules, absence of follicular opening in the scalp, perifollicular white scaling of the eyelashes, keratotic papules with keratin plug on the skin. The skin biopsy confirmed the diagnosis of keratosis pilaris while the biopsy specimen taken from the scalp showed orthohyperkeratosis, lichenoid infiltrate of lymphocytes in the dermis evoking a lichen planopilaris.

3. Key Message:

Anamnesis, dermoscopy and hair biopsy are crucial to differentiate between lichen planopilaris and keratosis follicularis spinulosa decalvans.

Generalized tufted hair folliculitis

HAMICH Soumaya 1 *, KARRAKCHOU Basma 1, MEZIANE Mariame 1, SENOUCI Karima 1

1Department of Dermatology, Mohamed V University in Rabat, Ibn Sina University Hospital, Morocco

* First author : HAMICH Soumaya

Address: Department of Dermatology, University Hospital Center Ibn Sina, University Mohamed V, 10170 Rabat, Morocco

Phone number : +212661895221

E-mail : hamich.soumaya@gmail.com

Background:

Tufted hair folliculitis is a rare condition of the scalp that affects mostly male adults in the fourth and fifth decade (1). Only few cases have been reported worldwide (2). The etiology is still unknown, some authors incriminate staphylococcus aureus given the presence of positive cultures on the lesions (1). It is due to a clustering of contiguous follicular structures as a result of fibrosis, and to follicular retention of hair in the telogen phase over several cycles (1). The areas of scalp mostly affected are the occipital and parietal areas (2). Clinically it presents as plaques of scarring alopecia among clumps of hair emanating from dilated follicular orifices. Trichoscopy findings are polytrichia, perifollicular hyperplasia in a starburst pattern, yellowish tubular scaling, crusting and follicular pustules (3).

Observation:

We report the case of a 50-year-old male patient with no medical history who presented with itchy lesions of the scalp evolving since 10 years. He recalls being treated two years ago by doxycycline 100 mg once daily for 6 months without any improvement.

On examination, we observed some scattered folliculitis lesions, sparse hair and an acne keloidalis nuchae (figures 1,2,3). On dermoscopy we noticed the presence of multiple hairs emerging (>5) from each follicular opening (figure 4), surrounded by tubular scaling (figures 4, 5). There was a diffuse erythema and a few hemorrhagic crusts (figure 5). Interfollicular parallel white lines were noted (figures 5,6).

We did not perform a biopsy. We have considered the diagnosis of hair folliculitis associated with acne keloidalis nuchae. We placed the patient on Sulfamethoxazole + trimethoprim (400 mg/80 mg) twice daily. We noted a significant improvement after three months of treatment.

Key message:

Herein we report the case of a patient with a mild tufted hair folliculitis where the entire scalp is affected. We did not find the perifollicular starburst pattern, but a new dermoscopic finding which is interfollicular parallel white lines that illustrate the process of fibrosis.

References:

- 1- Hughes EC, Badri T. Tufted Hair Folliculitis. StatPearls [Internet], August 2020.
- 2- Broshtilova V, Bardarov E, Kazandjieva J, Marina S. Tufted hair folliculitis: A case report and literature review. Acta Dermatovenerol Alp Pannonica Adriat 2011;20:27-9.
- 3- Rudnicka L, Olszewska M, Rakowska A, Slowinska M. Trichoscopy update 2011. J Dermatol Case Rep 2011 4, pp 82-88.

Figures:

Figures 1, 2 and 3: scattered folliculitis lesions, sparse hair and an acne keloidalis nuchae.

Figures 4, 5 and 6: multiple hairs emerging from each follicular opening surrounded by tubular scaling, diffuse erythema, hemorrhagic crusts and interfollicular parallel white lines?

Conflicts of interest: None disclosed

Plasmacytoid dendritic cells as initiators in alopecia areata and their clinical biomarkers

E. Kyrmanidou*¹, T. Koletsa², E. Sotiriou³, D. Ioannides³, C. Fotiadou¹, S. Chatzopoulos⁴, Z. Apalla¹, P. Hytioglou², E. Lazaridou¹

¹2nd Department of Dermatology and Venereology, Aristotle University of Thessaloniki, Greece

²Pathology Department, Faculty of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece.

³1st Department of Dermatology and Venereology, Aristotle University of Thessaloniki, Greece

⁴School of Statistics and Insurance Science, University of Western Macedonia, Kozani, Greece

Corresponding author: E. Kyrmanidou, MD, MSc

Email: ekyrmanidou@gmail.com

Background

Alopecia areata (AA) is an inflammatory disease of the hair follicle with autoimmune signature. The perifollicular inflammatory infiltrate has been linked to immune privilege compromise. The complex interplay and communication between cells of the immune system and the microenvironment around the hair follicle ensure a homeostasis which is compromised in AA. It is recently reported that regulatory T cells (Tregs) participate in immune privilege collapse in multiple autoimmune skin diseases implying contribution to their pathogenesis. Plasmacytoid dendritic cells (pDCs) are premium producers of IFN- α during inflammation and since presence of type I IFN in lesions of AA is evident, we explored the contribution of pDCs in acute, intermediate and chronic lesions.

Aims and Objectives

To examine if pDCs are involved not only as possible initiators of the disease but as components important in the maintenance of the immune process. Furthermore, we examined the involvement of T regs in the different stages of the disease.

Methods

Lesional scalp specimens of patients with AA divided into acute, intermediate or chronic stages were examined by immunohistochemistry for expression of CD4, CD8, CD123 and FOXP3.

Results

In our study, perifollicular presence of pDCs is associated with the intermediate stage of AA, followed by the acute and the chronic stage ($p=0.022$). Furthermore, we found an association of CD123+ cells and FOXP3+ cells in the immune infiltrate surrounding the hair follicle ($p=0.013$). We found a significant association of CD123+ cells with exclamation mark hairs in dermoscopy especially in intermediate stage of AA ($p=0.015$), as well as between exclamation mark hairs and the stages of the disease ($p=0.033$).

Conclusions

AA is considered an immune mediated disease. Since the clinical progression of this disorder is unpredictable, it can be hypothesised that the recruitment of immune components and the composition of the immune infiltrate may differ depending on the duration of the lesions. This study suggests a role of pDCs in the pathogenesis of AA and possibly contribute in the initiation and in the early stages of the disease but not in maintaining the chronic process. Tregs as inducers of immune tolerance seem to be anergic bystanders in perilesional skin. According to our results, coexistence and association of Tregs and pDCs in a subset of AA lesions may reflect the biology of an impaired immune microenvironment. Furthermore, specific dermoscopic features, i.e. exclamation mark hairs, are found significantly associated with the presence of pDCs. Thus, the finding of exclamation mark hairs in dermoscopy could reflect a clinical marker not only in determining the stage of the disease but also in evaluating the engagement of immune components. Hence, dermoscopic detection of exclamation mark hairs in an AA lesion can act as an immunologic indicator and therefore justify therapy with JAK inhibitors, as IFN suppressors.

GENERALIZED HYPERTRICHOSIS DURING TREATMENT WITH TOPICAL MINOXIDIL IN A MALE PATIENT- CASE REPORT AND REVIEW OF THE LITERATURE

A. Lyakhovitsky, MD1, O.Segal, MD1, S., A. Barzilai, MD1, S. Gilboa, MD1.

1Department of Dermatology, Sheba Medical Center, Tel-Hashomer, Ramat-Gan, Israel.

Background:

Topical minoxidil is widely used to treat androgenetic alopecia. The common side effects include itching, scaling and contact dermatitis, both allergic and irritant. Another cutaneous side effect is hypertrichosis. Most cases are limited to the skin adjacent to the site of application, with rare reports of generalized hypertrichosis, mostly in women and children. Possible mechanisms include local post application spread; systemic absorption resulting either from an excessive daily dose, intensive rubbing of the scalp or a tendency for increased percutaneous absorption; and increased sensitivity of the hair follicles to minoxidil.

Observation:

A 25-year-old male developed generalized hypertrichosis 2 months following initiation of 5% topical minoxidil solution twice daily for androgenetic alopecia. Following the discontinuation of treatment within 4 months, hypertrichosis on the chest and extremities diminished, while facial hair persisted and local hair removal was used. Treatment with 2% minoxidil once daily was reinitiated and 2 months later raised to 5% once daily. On his 4-month follow-up scalp hair density improved without recurrence of increased facial hair re-growth.

Key message:

- Generalized hypertrichosis with topical minoxidil treatment in male patients can occur and is probably under reported because it is less cosmetically disturbing.
- A lower dosage can be used without the need for alternative treatment.

A CASE OF ACQUIRED TRICHORRHEXIS NODOSA DUE TO QUETIAPINE USE

1st L. Martinele^{1*}, 2nd I. Gyliene¹, 3rd M. Macejevska and 4rd J. Grigaitiene¹

¹Vilnius University Hospital Santaros Klinikos, Centre of Dermatovenereology, Lithuania

*Corresponding author: kuliesyte.lina@gmail.com

1. Background:

Acquired trichorrhexis nodosa is a hair shaft disorder, resulting in hair breakage. The most common cause of the disease is repetitive physical damage or chronic chemical exposure to the hair. Less frequently the disorder may be associated with other co-morbidities, e.g. thyroid disease or others. The condition is self-limiting, but the appearance of the hair may impair patients quality of life, so it is very important to determine the cause of the disease so to eliminate any factors that can cause breakage of the hair.

2. Observation:

We present a case of a 68-year-old female patient, who presented to our centre with a 1-year history of a progressing hair breakage of a localized area on the scalp. The patient denied having any physical or chemical hair procedures done, she did not introduce any new changes in her daily haircare routine. She had already received treatment with platelet rich plasma therapy, topical glucocorticoids, minoxidil without any effect.

Physical examination revealed a circular area in the back of the scalp around 10 centimeters in diameter of 1-2,5 cm hair with split ends and some full length hair around with apparent whitish nodules in their shafts. No similar findings were observed in the eyelashes, eyebrows or other hairy areas of the body. All laboratory tests and scalp biopsy results had no clinically significant changes. After inspecting damaged hair with light microscopy a "broomstick" deformity was detected and a diagnosis of trichorrhexis nodosa was made.

To evaluate any possible causes of the disease, additional thorough medical history from the patient was acquired. The patient indicated that approximately one year ago she was prescribed quetiapine 25 mg QD, and later on the symptoms started to appear. While experiencing various other side effects, like tachycardia, gastrointestinal symptoms, hand and feet edemas, shortness of breath etc., one month ago her family physician discontinued the drug and prescribed bromazepam 3 mg QD which resulted in rapid regression of forementioned complaints. 2 months after discontinuing quetiapine the hair started to regrow without any other additional treatment.

3. Key Message:

To sum up, it has not been reported in the literature that the use of quetiapine could cause acquired trichorrhexis nodosa. However in this case the course of the disease corresponds to the timeline of patient's concomitant medical anamnesis, highly suggestive of the quetiapine's effect to the hair itself. Also it is known that some antipsychotics might cause hair loss, thus we believe in the possible association of quetiapine's use and its induction of trichorrhexis nodosa.

ABSENCE EYEBROWS AND EYELASHES AT BIRTH DUE TO BIOTINIDASE DEFICIENCY

M. Mrugacz¹ *

¹ Department of Ophthalmology and Eye Rehabilitation, Medical University of Bialystok, Poland

*Corresponding author: malgorzata.mrugacz@umb.edu.pl

1. Background:

Biotinidase deficiency (BD) is an autosomal recessive inherited neurocutaneous disorder. The gene encoding biotinidase enzyme has been found in chromosome 3p25. Clinically untreated patients with BD can present with variable neurological and dermatological signs, such as seizures, hypotonia, feeding problems, developmental delay, hearing loss, optic atrophy ataxia, alopecia, and skin rash. The first symptoms may be seen at first week following birth until 1 year of age. The delay in diagnosis and treatment may cause irreversible neurological damage, growth retardation and autistic behaviours. The goal of the therapy is to increase biotin bioavailability by daily 5–20 mg lifelong biotin replacement.

2. Observation:

Two-months-old boy was admitted to ophthalmological clinic with the absence eyelashes at birth. Physical examination revealed the absence eyebrows and eyelashes. Neurological and pediatric examination was normal. He was born before the nationwide biotinidase newborn screening programme. Enzyme assay for biotinidase revealed low activities 1.4 IU/L (normal ranges >3.5 IU/L). Molecular analysis was performed for BD and he was found heterozygote for the mutation of R157H. Oral biotin replacement was started in a dose of 5 mg/day which improved his symptoms. Despite medication being administered, hearing loss and recurrent infections and dermatitis appeared at the age of 3 years.

3. Key Message:

The absence of eyebrows and eyelashes at birth may be first manifestation of biotinidase deficiency. Outcomes of newborn screening programs support the fact that biotin treatment started after birth prevents patients with biotinidase deficiency from developing symptoms.

CLINICAL STUDY ON THE EFFECTIVENESS AND TOLERABILITY OF PREFORMED GROWTH FACTORS VEHICULATED THROUGH IONOPHORESIS ON PATIENTS WITH ANDROGENETIC ALOPECIA AND TELOGEN EFFLUVIUM.

Starace M, Alessandrini A, Bruni F, Piraccini BM.

Dermatology, IRCCS Policlinico di Sant'Orsola. Department of Experimental, Diagnostic and Specialty Medicine-Division of Dermatology, University of Bologna, Bologna, Italy

*Corresponding author: michela.starace2@unibo.it

1. Background:

Androgenetic alopecia is characterized by a progressive miniaturization of hair follicles in a pattern distribution in genetically predisposed individuals. The efficacy of conventional therapies is variable, and therefore, there is a need for adjuvant and newer modalities of treatment in order to give faster and better outcomes.

2. Aims and Objectives:

Evaluation of the efficacy and tolerability of a combined therapy: preformed growth factors vehiculated through iontophoresis in patients with androgenetic alopecia and associated telogen effluvium, in order to obtain faster hair regrowth.

3. Methods:

We performed the treatment on 60 patients with androgenetic alopecia and telogen effluvium associated between June 2018 and June 2019. The total number of sessions was 4 every 3 weeks. Global photography and trichoscopy were collected at every session of therapy. All patients filled out a brief questionnaire of self-assessment.

4. Results:

Results were very promising, with improvement of hair density and thickening of the hair shaft diameter in most of patients seen with both global photography and trichoscopy. All patients were satisfied of the clinical result and reported a complete reduction in hair loss. No serious adverse side effects were reported.

5. Conclusions:

The use of growth factors associated with iontophoresis technique is a useful treatment for treating and preventing androgenetic alopecia. In addition, in case of associated telogen effluvium, this technique permit stopping hair shedding earlier, especially when cosmetic procedures do not give enough results with a better satisfaction by patients.

Category: hair disorders

EFFICACY OF AUTOLOGOUS MICROGRAFT TREATMENT FOR ANDROGENETIC ALOPECIA

C. Vincenzi^{1*}, A. Tosti²

¹ Colombina Vincenzi, Nigrisoli Hospital, Viale Ercolani 9, Bologna, Italy.

² Antonella Tosti MD, Fredric Brandt Endowed Professor of Dermatology, Dr. Phillip Frost Department of Dermatology and Cutaneous Surgery. University of Miami Miller School of Medicine, Miami

*Corresponding author: colombinavincenzi@hotmail.com

Androgenetic Alopecia (AGA) is the primary cause of hair loss worldwide in both men and women. It is a chronic and progressive disease that seriously impacts a patient's life quality. Available treatments are primarily effective in preventing disease progression and are more effective in the early stages. The Autologous Microcrafting Technology (AMT-RegeneraActiva) is a cutting-edge technology that promotes hair growth by fomenting a tissular regenerative environment, with no side effects. It processes autologous and homologous tissue to extract a solution of concentrated progenitor cells and growth factors that promote neo-angiogenesis and correct tissular homeostasis favoring follicle development. It can be used in association with other medical or surgical treatments, but it might also be considered as monotherapy. This study aims to demonstrate the effect of an AMT-RegeneraActiva treatment over a total period of 6 months in 16 patients undergoing AGA. Clinical evaluation, global photography assessment, and trichoscopy evaluation were done at the start of treatment and every 3 months of the follow-up. Trichoscopy evaluation was performed with FotoFinder leviacam using standard TrichoLAB trichoscopy report. This study shows a statistically significant improvement of hair diameter mean on the frontal area at 3 and 6 months. In conclusion, this technique as monotherapy increased hair thickness and improved scalp coverage.

NAILS DISORDERS

NEW ACQUISITIONS IN THE TREATMENT OF ONYCHOMYCOSIS WITH PHOTODYNAMIC THERAPY

C. Pedrinazzi,^{1*} S. Andreoli², J. Houang³ and A. Lauto³

¹University of Pavia, Italy

²ASST Vimercate, Italy

³University of Sidney, Australia

*Corresponding author: pedrinazzi@gmail.com

1. Background: onychomycosis is a common infection of the finger or toenails, predominantly caused by *Trichophyton Rubrum*. The main pitfalls in conventional therapy are high recurrence rate, interaction with other drugs, treatment compliance and toxic side effects.

A recent in vitro study has demonstrated the high efficacy of the photodynamic effect of rose Bengal on spore suspensions of *T. Rubrum*. Rose Bengal was able to induce a fungicidal effect when photosensitized with the fluence of 228 J/cm² by a green laser ($\lambda=532$ nm). This effect was confirmed by a first study we performed on patients affected by *T. Rubrum* onychomycosis.

2. Aims and Objectives: in this new study we describe our second experience on six patients affected by onychomycosis, treated with a variant of this innovative photodynamic protocol.

3. Methods: the nail surface was pretreated with a fractional CO₂ laser, then a topical application of a solution of Rose Bengal diluted at 140 μ M was applied for 30 minutes and thereafter irradiated with a 550 nm IPL source. Treatment was repeated every three weeks until clearance. Fungal cultures were tested before starting the protocol and after the last photodynamic session to demonstrate complete clearance of *T. Rubrum*.

4. Results: fungal clearance, no significant side effects and good compliance were observed in all patients. The number of sessions needed to obtain clearance ranged between 3 and 7.

5. Conclusions: this outcome agrees with our previous study and shows that the Rose Bengal PDT treatment is a potential new cure for *T. rubrum* infections.

ONYCHOCYTIC MATRICROMA - TWO RARE TUMOR CASES OF THE UNGUEAL UNIT

Natália Andressa Buss Venier¹, Ana Cristina Schmidt Dorneles¹, Isadora da Luz Silva¹, Fernanda Pacheco Brandão¹, Ana Letícia Boff¹, Leonardo Albarello¹, Renan Minotto¹.

¹Hospital Santa Casa de Misericórdia de Porto Alegre, Brasil

*Corresponding author: Venier NAB. E-mail: nataliabuss@hotmail.com

1. Background

Onychocytic matricoma is a matrix tumor, clinically presented as a localized thickening of the nail plate associated or not with melanonychia. We report two cases of this rare tumor with only nine reports in the literature so far.

2. Observation

Patient one, female, 55 years old, reports a lesion in the left hallux for 5 years. Patient two, male, 74 years old, with nail edge injury for 5 years. Physical examination observed onychodystrophy with plaque rupture. In dermoscopy areas of subungual hyperkeratosis, with roughness and an area suggestive of melanonychia. We performed incisional tangential biopsy of the origin of the lesion in the matrix. The pathological examination of both cases showed bed acanthosis with hyperpigmentation of the onychocytosis, basoloid cell proliferation without melanocyte proliferation. After surgical resection of both lesions, they are in outpatient follow-up without recurrences.

Onychocytic matricoma is a rare tumor of the nail matrix, first described in 2012. It presents as localized longitudinal melanonychia, associated or not with plaque thickening. Makes differential diagnosis with foreign body, nevi, squamous cell carcinoma, onychitic carcinoma, onicopapilloma and melanoma. The lesion begins a few months before the service and the patients were between 80 years of age.

3. Key Message

Recently described and rare matrix tumor that makes differential diagnosis with other causes of melanonychia and more aggressive nail tumors.

Reference

1. d'Almeida LFV, Jeunon T, Leverone AP, Nakamura RC. Matricoma onicocítico. *An Bras Dermatol*. 2019;94(2):214-6.
2. Perrin C, Cannata GE, Bossard C, Grill JM, Ambrossetti D, Michiels JF. Onychocytic matricoma presenting as pachymelanonychia longitudinal: a new entity (report of five cases). *Am J Dermatopathol*. 2012;34:54-9.
3. Perrin C. Germinotropic Onychocytic Matricoma: A New Histopathologic Subtype of Onychocytic Matricoma in the Light of the Microanatomy of the Normal Nail Unit, With Special Reference to Nail Mesenchyme. *Am J Dermatopathol*. 2017;39:97-101.
4. Wanat KA, Reid E, Rubin A. Onychocytic Matricoma: A New, Important Nail-Unit Tumor Mistaken for a Foreign Body. *JAMA Dermatol*. 2014;150:335-7.

ELKONYXIS IN DERMOSCOPY

M. El mansouri, Fz. El.Fatoiki, H.Skali, F.Hali, S.Chiheb

Department of Dermatology and Venerology HUC Ibn Rochd Casablanca

1. Background: Dermoscopy has been gaining popularity as a regularly utilized tool in managing patients with skin and nail disorders. Dermoscopy may aid in diagnosis of nail psoriasis even in inconclusive cases with poor arguments. The particularity of our case is the aspect dermoscopic of elkonyxis which is rarely described. Elkonyxis is a very large pits, seen in syphilis, Reiters disease, after trauma, and after etretinate and isotretinoin therapy. We report one case of patient presenting elkonyxis which help to diagnosis an ungual and vulval psoriasis.

2. Observation: 78-year-old woman, housewife, followed for hypercholesterolemia and familial hyper TG, idiopathic thrombocytopenic purpura and hepatitis C treated on 2016. She suffers for 3 years from a nail dystrophy of the hands and feet which develops by relapses / remissions and annoying her a lot. She had onycholysis. Pits were irregularly spaced with onychorrhexis and many elkonyxis on fingernails and toe nails. Dermoscopy allowed to visualize pitting with scales which were variable in size and shape giving elkonyxis. White discoloration with multiple white longitudinal striae surrounded by a yellow band was visualized. The examination of the skin discover an intertrigo interfessier and vulval erythema

3. Key message: Pitting is occasionally helpful in building a clinical case for psoriatic arthritis, in the absence of other definitive markers, especially where it is the only cutaneous manifestation of psoriasis. Dermoscopy represents an indispensable tool that physicians have recently added to their arsenal of approaching and managing onychopathies.

ONYCHOMYCOSIS: CORRELATION BETWEEN THE DERMOSCOPIC PATTERNS AND FUNGAL CULTURE

Naglaa A Abdallah¹, Marwa Said¹, M Taha², Maha A Omar¹

¹, Dermatology department, faculty of medicine (for girls), Al-Azhar University

² Microbiology department, faculty of medicine, Zagazig University

Corresponding author: Marwa Said

mderm2014@gmail.com

1. Background: (11-point boldface) Onychomycosis is a dermatophyte fungal infection of the nail plate, bed and the matrix, leading to the gradual damage which often considered a cosmetic problem. Several presentations of onychomycosis; distolateral subungual (DLSOM), superficial white, proximal subungual, endonyx and total dystrophic (TDOM). Although the diagnosis relies on mycological results, there are three specific dermoscopic findings for onychomycosis: a jagged edge of the onycholytic area, with spikes directed to the proximal fold, white-yellow longitudinal striae in the onycholytic nail plate and colored parallel bands.

2. Aims and Objectives: The objective of this diagnostic cross-sectional study was to evaluate the diagnostic accuracy of dermoscopy as a low-cost tool compared to fungal culture in patients with onychomycosis.

3. Methods: This study was carried out on 40 patients with a clinical diagnosis of onychomycosis collected from dermatology outpatient clinic of Alzahraa University Hospital after approval from the research ethics committee of Al-Azhar University, For each patient, dermoscopic imaging of nail was done. And nail scrapings, culture on sabouraud's dextrose agar medium and dermatophyte test agar medium. Informed written consent was taken from all patients and the data collected from dermoscopic and lab results were statistically evaluated.

4. Results: Concerning the dermoscopic features, longitudinal white striae, jagged proximal edge with spikes, were the most commonly detected in DLSOM and TDOM. linear edge was exclusive to traumatic onycholysis. Laboratory results: Aspergillus was the most common detected fungus (45%) followed by Candida (32.5%).

5. Conclusions: dermoscopy could facilitate the diagnosis of onychomycosis and differentiate it from mycologically negative onycholysis.

SUBUNGUAL ACANTHOLYTIC DISKERATOTIC ACANTHOMA – REPORT OF CASE

Ana Cristina Schmidt Dorneles¹, Isadora da Luz Silva¹, Natália Andressa Buss Venier¹, Leonardo Albarello¹, Ana Letícia Boff¹, Eckart Haneke^{2,3,4} and Renan Minotto^{1*}

¹Hospital Santa Casa de Misericórdia de Porto Alegre, Brasil

²Berne, Switzerland: Visiting Prof

³Porto, Portugal: Consultant Centro Dermatol Epidermis, Inst CUF

⁴Ghent, Belgium: Visiting Prof

*Corresponding autor/ Coordinator and Prof of The hair and nail unit of the service:

R. Minotto. E-mail: rminotto@gmail.com

1. Background:

A 64-year-old-men presented on clinical examination a longitudinal paramedian whitish band in the fourth right chirodactyl, with distal onycholysis, which had gradually evolved over the course of 2 years and recurrent paronychias. There were no other nails involved in the hands or toes, no other skin findings. A magnetic ressonance imaging of the joint was performed, which showed a slight soft tissue injury in the subungual region at the level of the distal phalanx of the fourth finger measuring 0,4 x 0,3 cm. The histological examination revealed bed and matrix acantosis with acantholysys and the presence of rare individually keratinized keratinocytes, no fungal organisms were identified with special stains. The diagnosis was compatible with subungual acantholytic dyskeratotic acanthoma.

2. Observation:

The presence of acantholytic dyskeratotic acanthoma in a subungual location has only been rarely reported, few cases are described in the literature. This pathology presents histological pattern characterised by the presence of supra-basilar or intraepidermal clefting secondary to acantolysis in association with evidence of diskeratosis. Some inflammatory conditions are characterised by this pattern like Grover's disease and Darier's disease, but may also present as solitary lesions.

3. Key Message:

We report this case of subungual acantholytic dyskeratotic acanthoma, a solitary lesion, to assist the dermatologist in recognizing this condition.

TITLE -ONYCHOSCOPY MADE EASIER! - THE INNOVATIVE USE OF AN OINTMENT CARTON FOR EASY VISUALIZATION OF THE NAIL APPARATUS

Topic – Nail disorder

Sanober Burzin Daruwalla¹ *, Ravina Surve¹ , Suraj Pai¹ , Mithali Jage¹ , Aseem Sharma¹ , Rachita Dhurat¹ , Smita Ghate¹

¹-Lokmanya Tilak Medical college and General Hospital , Sion , INDIA

*E-mail address:sanober46@gmail.com

1. Background: More often than not, difficulty is faced while performing onychoscopy due to the peculiar anatomy and convexity of the nail. Onychoscopy serves as a window to the armamentarium of nail disorders with a potential to prevent biopsy. However, the inability to visualise the entire nail in one field, and the requirement of frequent shifting of focus and angle is often discouraging for many.

2. Aims and Objectives: To devise a method to make onychoscopy easier .

3. Methods: We describe a simple, inexpensive, easy to reproduce framework using an ointment carton. A small window of approximately 1.5cm² is created on one side of a small-sized ointment carton (5gm or 10gm) that would have otherwise been discarded. A thin layer of cotton is added within the carton, acting as a cushion over which the finger being examined rests. The contact plate of a video or handheld dermoscope is placed over the created window such that it's periphery rests over the carton, while the part of the nail to be examined is placed at the created window. Various structures of the nail including the nail plate, nail bed, proximal nail fold and hyponychium can be visualised keeping the dermoscope steady; maintaining observer and patient comfort. After an initial dry examination, an interface medium can be added for better clarity of the part to be visualised.

4. Conclusions: This simple, resource-poor innovation provides for optimal visualisation of vasculature during nail fold capillaroscopy, by avoiding any undue pressure by the patient or the examiner, as an added advantage.

ONYCHOMADESIS SECONDARY TO HAND-FOOT-AND-MOUTH DISEASE

Magdalena Żychowska* 1

1 Department of Dermatology, University of Rzeszów, Rzeszów, Poland

magda.zychowska@gmail.com

Background:

Onychomadesis is the proximal nail shedding related to temporary cessation of matrix proliferation. It is frequently associated with viral infection 1 to 2 months prior to the development of nail changes. Onychomadesis is usually self-limiting and does not require treatment. Spontaneous regrowth is typically observed within 4 to 12 weeks. Onychomadesis following hand-foot-and-mouth disease (HFMD) has been particularly underscored in the literature.

Observation:

A 15-year-old girl presented with proximal separation of the nail plates of three-day duration, involving the second and third fingernail of the right hand and the second fingernail of the left hand. The girl was otherwise healthy and did not take any medications. Physical examination, apart from nail changes, revealed erythematous macules on both palms and soles. On detailed questioning, the patient reported the presence of blisters and erosions on hands, feet and oral mucous membranes one month earlier. The diagnosis of onychomadesis following HFMD was made. The lesions resolved completely without treatment within 6 weeks.

Key Message:

Onychomadesis is not an uncommon complication of HFMD. Nevertheless, it might arouse anxiety among parents and doctors. Thorough history for infections 1 to 2 months prior to nail lesions development should be taken in each case of proximal nail shedding. Watch-and-wait approach is recommended as spontaneous nail regrowth is usually observed within several weeks.

ONYCHOMYCOSIS TREATMENT IN TUNISIA

1st M. Lakhal 1, 2nd N. Litaïem 2, 3rd J. Yaakoubi 3, 4th H. Chaker 4, 5th T. Bacha 5, 6th M. Jones 6, 7th F. Zeglaoui 7.

Department of dermatology, Charles Nicolle Hospital, Tunis, Tunisia.

E-mail: marialakhal@yahoo.fr

1. Background:

Onychomycosis is a fungal infection of the ungual system that can affect quality of life by causing aesthetic or functional discomfort. The choice of drug depends on the location of the onychia, its clinical form and the nature of the fungus.

2. Aims and Objectives:

The therapeutic choice takes account the clinical form, the fungal agent, and the socio-economic level of the patient.

3. Methods:

This is a prospective and analytical study over a period of 17 months (March 15, 2016 - August 15, 2017) on case of onychomycosis confirmed by mycological examination seen in the dermatology department of Charles Nicolle.

4. Results:

148 patients were collected with an average age of 48.73 and a sex ratio M/F = 0.61%. Systemic antifungal therapy was prescribed in 89 patients (60.1%). No treatment was prescribed for 38 patients remaining because of the patient's refusal of treatment (20%; n=12), a contraindication to general treatment (8%; n=5). The systemic treatments prescribed were terbinafine for 59 patients (66%) and fluconazole for 30 others (34%). Concerning dermatophytic onychomycosis, only 32.5% of our patients (n=13) with a terbinafine prescription took it and 61.1% of the patients put on fluconazole, took it for 3 months.

5. Conclusion:

Onychomycosis is the main cause of ungual lesions. The treatments is long, expensive, not available at the hospital and marked by the frequency of relapses.

DIGITAL FIBROKERATOMA WITH SUBUNGUAL EXOSTOSIS

Authors: S. Maouni*; M. Meziane; K. Senouci

Author's affiliation:

Department of dermatology, Ibn Sina University Hospital of Rabat. Morocco

*Corresponding author:

Safae Maouni

maouni.safae88@gmail.com

1. Background:

Subungual exostosis is a benign osteocartilaginous tumor that occurs in 70 to 80% of cases in the big toe of teenager or young adult. First described by Dupuytren in 1847.

Observation:

A 52 year-old-man, follow-up for neurofibromatosis type 1, presented with a painless periungual nodule of the right thumb, gradually increasing in size over several years (Figure 1). In dermoscopy, a proximal white area and yellow distal appearance with hyperkeratosis were visible (Figure 2). X- Ray examination of the right thumb showed a bone outgrowth of distal phalanx (Figure 3). Surgical removal of the tumour has been performed and histologic examination was consistent with fibrokeratoma, showing an epidermal hyperkeratosis with dermal fibroblasts and collagen bundles.

3. Key Message:

The particularity of our observation lies in the association of two benign tumours on a specific genetic field of neurofibromatosis type 1. Dermoscopy as a non-invasive technique can guide the diagnosis in these doubtful cases. This association is unusual, it has been described by Cogrel in 2016. Both situations may be occur as a periungual nodule and can be favoured by trauma, which explains the usual location on the right toenail. In dermoscopy, hyperkeratosis and yellow appearance have been described in both conditions, corresponding to epidermal hyperkeratosis in histology, the proximal white area observed in fibrokeratoma represent the dermal fibroblasts with collagen bundles.

Background.

Skin cancers constitute about 75% of all malignancies. Squamous cell carcinoma (SCC) is the second (15-20%), after basal cell carcinoma, malignant skin cancer. It rarely metastasizes. May infiltrate surrounding tissues such as bone. SCC of the nail apparatus is rare 0.0012%-0.028%. Clinically, it is most often a nodule. Differential diagnosis includes: HPV warts, onychomycosis, pyogenic granuloma, amelanotic melanoma. Clinical picture, dermoscopy, RCM, OCT are helpful in the diagnosis. Histopathology is conclusive. Surgery is the most common method of treatment.

Observation.

A 64-year-old patient was consulted because of a 10mm hyperkeratotic nodule under the left thumb nail, present from about 8 years. Patient reported an insect bite into a nail shaft with 3-4 mm discoloration and paresthesia. In the past patient was treated with an oral antifungal medicines and nail plate removal - without improvement. Videodermoscopy revealed variously shaped blood vessels, extravasation and yellowish amorphous structures. Histopathological examination revealed squamous cell carcinoma with Bowen cells. X-ray picture of the hand - without abnormalities. SCC was surgically removed.

Key Message.

The prognosis is good if SCC is diagnosed early. Dermoscopy is useful for establishing diagnosis and choosing a biopsy site. X-ray is necessary especially in case of pain. In the case of bone invasion, amputation is performed. Due to the risk of recurrence, long-term monitoring is recommended.

Background

Onychoscopy (nail dermoscopy) is the non-invasive examination method of the nail apparatus. In diseases such as onychomycosis, bacterial or viral infections, psoriasis or lichen planus, onychoscopy is a complementary method for the physical examination, direct mycological examination, culture or biopsy. However, in the case of suspected neoplastic lesions, the histopathological examination is conclusive.

Aims and Objectives

An overview of literature and presentation of our own experience on the current applications of onychoscopy.

Methods

English literature review in Medline, books, atlases, abstracts of conferences and present our own onychoscopic cases. Examination was performed with the videodermoscope Fotofinder and the clinical picture was made with the camera Canon G8.

Results

We present onychoscopic patterns for selected cases of nail apparatus diseases, such as cancers, pigmented lesions, onychomycosis, psoriasis or lichen planus.

Conclusions

Onychoscopy is a valuable supplementary method in diagnosing nail apparatus diseases. It is also very useful tool facilitating differential diagnosis of various nail conditions. Besides the diagnostic role of onychoscopy, there is increasing evidence that it can also help in the monitoring of treatment efficacy for some diseases and observing pigmented lesions of the nail apparatus

ASSOCIATED USE OF TEST PRODUCTS INCREASES PERFORMANCE IN THE STRENGTHENING OF NAILS WHEN COMPARED TO THE USE OF ONLY ONE PRODUCT, EVALUATED THROUGH CLINICAL EVALUATION, SELF-ASSESSMENT AND NAIL STRENGTH MEASURES (INSTRON).

L.O. Guerra^{1,2}, D.T. Almeida¹ and A.B. Rosato ^{3,*}

¹ Allergisa Pesquisa Demato-cosmética Ltda, Brazil

² Faculdade de Ciências Médicas – UNICAMP, Brazil

³ Escola Paulista de Medicina – UNIFESP, Brazil

* fdrago@biolabfarma.com.br

1. Background:

Brittle nails can be associated to many different issues: peeling, splitting or weakness. To decrease or even eliminate those issues the cosmetic and pharmaceutical industries have been developing many different products and treatments.

The present work focus on nails weaknesses and its reduction or, in other words, the increase of strength of the nails by two different treatments:

1) Onicut Capsule: contains *Oryza sativa* hydrolyzed protein, L-leucine, L-valine, L-isoleucine, ascorbic acid, ferrous bisglycinate, nicotinamide, calcium D-pantotenate, N-pteroyl-L-glutamic acid (folic acid), biotin, stabilizer: microcrystalline cellulose; antiuementant: silicon dioxide; Capsule composition: Gelling agent: Gelatin; cutting: titanium dioxide and red 40. According to the nutrition chart, the 2-capsule portion contains 1.0g protein and vitamin dosages in 100% of the recommended daily intake. The iron mineral makes up 25% of the recommended daily intake. Amino acids are present in the following dosages: L-leucine 234mg, L-valine 156mg, L-isoleucine 120mg. The complete composition as well as the dosages can be confirmed on the product packaging. The purpose of this formulation is to provide the nutrients needed to supplement deficient diets. Nutrients have well-established functions in the scientific literature. It may contain soy and derivatives, so allergic people should avoid consumption.

2) Onicut Gel: is a strengthening gel developed with ingredients that act directly on nail plate and cuticles. Its composition contains the exclusive Nailvit and extract of amino acids of plant origin that strengthen and protect the nails. It improves nail resistance and hydration through a system that forms a protective film. Onicut gel is recommended for the prevention and care of brittle and peeling nails. Prolonged use helps keep nails strong and healthy. It is composed of water, alcohol, pullulan, dimethyl sulfone, glycerin, Acacia senegal gum, hydrolyzed keratin, sodium benzoate, potassium sorbate, *Panicum milliaceum* extract, hydrolyzed rice extract and biotin. All ingredients are excipients of the formulation. It has a triple action: it protects, moisturizes and strengthens fragile nails.

Treatments were evaluated both individually and combined, in a period of 90 days of use, by three different methodologies: self-assessment, clinical evaluation and flexure module by instrumentally bending the subjects' nails.

2. Aims and Objectives:

The aim of the study was to assess the increase of nails strength when using combined (oral and topical) and individual treatments. Moreover, it was expected that the combined treatment would be superior in effectiveness to the individual treatments in increasing the strength of the nails.

3. Methods:

Three different groups of subjects were evaluated: one that used the capsule formulation (Group 1), one that used the gel formulation (Group 2) and one that used both formulations (Group 3). Each group used the designed product or products for 90 days and assessments were performed in T0 (before the use of the products), T45 (45 days of products use) and T90 (90 days of products use).

The flexure module of the nails was assessed through compression measures with an INSTRON machine. A controlled and increasing force was applied to the nail, the bending force was recorded and the flexure module was calculated. Three different measurements were performed for each nail and a pause time of approximately five minutes were done before each new measurement. Measures were performed in T0 and T90.

A dermatologist assessed the subjects' nail's Thickness, Delamination / Peeling, Malleability, Opacity, General Appearance and also Brittle Nails in T0, T45 and T90.

Subjects performed a self-assessment through questionnaires in T0, T45 and T90. The nails attributes assessed were: Chipping, Peeling, Breaking, Strengthening, Growth, Natural Shine, Thickness, Healthier Appearance, Malleability (Hardening), Resistance and Hydration.

4. Results:

Instrumental measures for flexure module presented no statistical difference for the groups when T0 and T90 were compared, although Group 3 showed an increase in the mean in T90, whereas Groups 1 and 2 did not.

When comparing the treatments among them, Group 3 presented a significant increase in flexure module when compared to Groups 1 ($p = 0.046$) and 2 ($p = 0.043$), showing a better performance of the use of combined products than individually. Groups 1 and 2 presented no statistical difference when compared to each other ($p = 0.446$).

All groups presented a statistical improvement in T45 and T90 for the clinical evaluation, when compared to T0. Group 3 presented a statistical improvement over Group 1 for Delamination / Peeling ($p = 0.049$). The combined treatment showed better results for the nails in the clinical evaluations.

In the self-assessment, Group 3 showed higher percentages of improvement for all attributes, followed by Group 2 and Group 1, respectively, in all time points, highlighting once more the superiority of the combined treatments over individually treatments.

The overall evaluation of the results, generated through objective (instrumental) and subjective (clinical to self-assessment) methods, showed that the combined use of both formulations is more effective and promotes higher benefits to the nails than the use of each product separately.

5.Conclusions:

The formulations of Onicut Gel and Onicut Capsule promoted improvement in the nails' strength.

The use of the combined treatment – Onicut Gel + Onicut Capsule – is more effective in promoting the strengthening of the nails than the use of the individual's formulations

Identification of clinical parameters associated with nail psoriasis severity and therapeutic efficacy

1st Zimeng You, 2nd Heli Yang and 3rd Yuping Ran*

1 Department of Dermatovenereology, West China Hospital, Sichuan University, Chengdu, China

*Corresponding author: ranyuping@vip.sina.com

1. Background: Nail psoriasis was common while there were few detailed studies of clinical parameters related to disease severity and therapeutic efficacy.

2. Aims and Objectives: Our retrospective study aimed to describe prevalence and clinical characteristics in nail psoriasis patients and determine the associations between multiple clinical parameters and disease severity or therapeutic efficacy.

3. Methods: A total of 89 nail psoriasis patients were included in this study. The Nail Psoriasis Severity Index (NAPSI) and the Nijmegen-Nail Psoriasis Activity Index tool (N-NAIL) were used to measure severity and improvement of nail psoriasis. Severity and efficacy related parameters were analyzed.

4. Results: Subungual hyperkeratosis (94.4%) was most commonly observed nail feature. Coexist of pitting and leukonychia, transverse grooves and thickening were more common in juveniles than adults. Patients with higher NAPSI score were more likely to develop discoloration while patients with higher N-NAIL score were more likely to develop discoloration, mottled lunula and subungual hyperkeratosis. We analyzed the efficacy after fixed interval of treatment, most clinical parameters were not related to therapeutic efficacy, including disease duration, age of onset and amount of nail signs. However, when evaluating efficacy after 6-months' treatment, we found the presence of transverse grooves was associated with better efficacy. It was also seen in transverse grooves, longitudinal ridges and discoloration when compared the best score to the score of first visit.

5. Conclusions: Be aware of clinical parameters related to severity and therapeutic efficacy is helpful for clinicians to choose individualized treatment and predict prognosis.

PERIUNGUEAL PIGMENTED BOWEN'S DISEASE, AN UNUSUAL LOCATION. CASE REPORT

Ramírez Méndez Tania Gissel^{1,*} Quintal R. Marissa de J.², Barragan E. Zamira F.³, Guevara C. Rosa M.⁴, Diaz P. Nancy⁵.

¹Resident Physician of Dermatology, Hospital Especialidades CMN La Raza, IMSS, Mexico City

²Physician assigned to the Pathology Department, Hospital Especialidades CMN La Raza, IMSS, Mexico City

³Physician assigned to Oncodermatology Unit, UNAM, Mexico City

⁴Physician assigned to Dermatology Department, Hospital Especialidades CMN La Raza, IMSS, Mexico City

⁵Physician in charge of Dermatology Department, Hospital Especialidades CMN La Raza, IMSS, Mexico City

*Corresponding author: tan.rm@hotmail.com

Background:

Bowen's disease (BD) is a form of Squamous Cell Carcinoma (SCC) in situ originally described by John Bowen in 1912. The peak incidence of the disease is found in the seventh decade of life, and is more common in women. The most frequent locations of SCC in situ are sun exposed areas, the risk of progression into an invasive form of SCC is between 3% and 5%. (1)

The pigmented variant, according to the study of Ragi et al., represents 1.7% cases of Bowen's disease. Occurs usually on unexposed areas in patients with darker skin phototype and it is presented with a pigmented, scaly plaque (2)

Despite being a relatively common condition, the pigmented variant is rare, and the periungual location is uncommon. Clinically it presents as a scaly or wart-like non-homogeneous lesion that is often confused with other diseases such as pigmented actinic keratosis, seborrheic keratosis, melanoma, basal cell carcinoma or nevus. Dermoscopy is a diagnostic challenge and the treatment of choice is surgery (2).

A case of pigmented Bowen disease in periungual region treated with skin graft is reported.

Observation:

A 46 year old male patient with Fitzpatrick's phototype IV, attended the dermatology service for a pigmented lesion that appeared 3 years ago with progressive growth. He referred family history of Diabetes Mellitus, and personal history of penicillin allergy. Denies arsenic intake, trauma, or burns. Physical examination exposed dermatosis

located at the upper right limb affecting the fifth finger in the periungual region, characterized by an exophytic neoformation of 2x2cm in diameter, well-defined irregular borders. Dermoscopy shows pseudonet pigment, and cerebriform pattern with some scabs on its surface, and a central whitish patch, with at least 4 different colors. As it is a multicomponent pattern, the first diagnostic impression was an acral melanoma, being this variant the most common in Mexico. A 4mm punch biopsy was performed, reporting pigmented bowen disease. Excisional surgery was made with full thickness cutaneous graft placement without complications.

Key Message:

Bowen's disease or Squamous Cell Carcinoma in situ is typically asymptomatic and the most affected sites are head and neck, unusually occurring at the nail unit. Some studies revealed that genitalia and fingers affection is strongly associated with human papillomavirus (serotype 16), radiodermatitis, chronic trauma, and oral exposure to arsenic. At the nail unit, lesion usually begins at periungual area and progresses involving the nail bed and matrix. The risk of developing invasive carcinoma in is 3-5% in extragenital lesions and about 10% in genital lesions.(3)

It is challenging for physicians to differentiate from more common cutaneous lesions, as it can clinically mimic benign condition, potentially leading to a diagnostic delay and an adverse outcome. Important differential diagnoses are psoriasis, viral warts, eczema, lichen simplex chronicus, chronic paronychia, periungual dermatitis and other malignancies like melanoma and superficial basal cell carcinoma.(4)

Dermoscopy of pigmented variant of Bowen's disease is not specific, small brown globules regularly in a patchy distribution and brown to grey homogenous pigmentation are often observed. Features resembling those in melanocytic lesions, such as reticular pigmentation, regression-like areas, irregular brown glomerular structures, have been described. The Combination of brown and grey dots or clods and structureless, hypopigmented areas is less frequent, but on the other hand much more specific. Coiled vessels, are recognized in hypopigmented areas and can be arranged in a linear, clustered or random manner. We can find globules and pigment network, so it is confused with a melanocytic lesion, the use of dermoscopy is recommended for the follow-up of the patient after treatment. (5)

The diagnosis is confirmed with histopathology in where we can see loss of epithelial cell polarity, total involvement of the epidermis with atypical keratinocytes and mitosis observed in the upper layers of the epidermis.

The unusual location of the lesion in our patient represents a diagnostic and therapeutic challenge due to the risk of affecting the motor or sensory function of the finger, the goal of treatment is the complete removal of the tumor and preservation of finger's cosmetics and functionality. The gold-standard treatment is surgical removal, but it could result even in mutilation. Mohs surgery can be performed where available because it permits

adequate excision with maximal preservation of normal tissue and function. Conventional surgery can be performed with 5 mm margin as long as it does not affect the functionality of the finger. Treatment with imiquimod and photodynamic therapy have also been described. (6)

References:

1. Luiza S. Bruna S. Benjamin S. Thiago J. "Periungual pigmented Bowen's disease treated by micrographic surgery" *Surg Cosmet Dermatol* 2016;8(4):46-9.
2. Anna W. Lidia R. "Bowen's Disease in Dermoscopy" *Acta Dermatovenerol Croat* 2018;26(2):157-161.
3. Sharon K. Grace S. Teresa S. "Periungual Bowen's Disease in a 4-Year-Old Girl" *Pediatric Dermatology* 2014; 31 (1):22–23.
4. Andrew H. Adnan M. Bryan C. "High-risk human papillomavirus in a child with digital pigmented Bowen's disease: Case report and dermoscopic findings". *Pediatric Dermatology* 2018 ;1: 1–3.
5. Jason G. Aimilios L. Iris Z. Giuseppe A. Reggio E. "Periungual Bowen disease mimicking chronic paronychia and diagnosed by dermoscopy" *J AM ACAD DERMATOL* 2014; 71 (3): 65-67.
6. Beatrix S. Lívia V. Bianca O. Thiago J. Juliana M. "Periungual Bowen's disease successfully treated with photodynamic therapy" *Photodiagnosis and Photodynamic Therapy* 2013; 10(4): 535-7.

NAIL CHANGES IN CHRONIC KIDNEY FAILURE

N. Daadaa¹, A. Souissi ^{1*} I. B. Ben Kaab ², K. Zouaghi ², H. Dougui ³, M. Mokni ¹

¹ Dermatology department. Rabta hospital. Tunisia

² Nephrology department. Rabta Hospital. Tunisia

³ Internal medicine department. Internal Forces of Security Hospital. Tunisia.

*Corresponding author: dr.asmahanesouissi@gmail.com

Background: Nail changes (NC) in chronic kidney failure (CKF) are polymorphic.

Aims and Objectives: To evaluate epidemiological and clinical patterns of NC in CKF.

Methods: A cross-sectional bi-centric study was achieved over a period of 8 months. Outpatients with a confirmed CKF were evaluated for the presence of NC.

Results: We included 69 men and 42 women with CKF. Mean age was 64 years. One or more NC were observed in 91,9 % patients. Specific NC were half-and-half nails (48,6%), absent lunula (5,4%) and Muehrcke's lines (2,7%).

Various non-specific NC were noticed, mainly xanthonychia (63,1%), pachyonychia (55%), onycholysis (52,3%), longitudinal ridging (45%), melanonychia (20,7%) and leukonychia (12,6%). Onychomycosis was confirmed by mycological swab in 32,4% cases.

NC were correlated with the stage of CKF ($p=0.043$). They were more frequent in stage 5 dialyzed or not (95,2% and 100% of patients).

Conclusions: NC have been reported up to 82% of patients with CKF. In our study, their prevalence were much higher since the majority of patients were security officers highly susceptible to feet microtrauma. Association with stage of CKF, seen in our series, has never been reported. Half-and-half-nail is considered characteristic of uremia but it is also described in general population, psoriasis, Behcet's syndrome and crohn's disease.

NAIL SARCOIDOSIS

Authors: S. Maouni*; M. Meziane; K. Senouci

Author's affiliation:

Department of dermatology, Ibn Sina University Hospital of Rabat. Morocco

*Corresponding author:

Safae Maouni

maouni.safae88@gmail.com

1. Background:

Involvement of the nail system in sarcoidosis is rare. It is seen in only 1.6% of patients with cutaneous sarcoidosis.

2. Observations:

A 25-year-old man and 57-year-old woman. The first was followed for rheumatism of the large and small articulations for 4 years labelled as psoriatic rheumatism and referred to dermatology for nail involvement. The skin examination found a nail dystrophy of the affected fingers with trachyonychia (2nd and 3rd left finger and 3rd and 5th right finger). There was deformity of the distal interphalangeal joints with no distant cutaneous lesions. The second patient had bilateral and disabling dactylitis for 2 years, with ulcerous plaques on the 4th right and left fingers and 2nd right and left toes with a pudgy appearance of the fingers. On the affected toes, there was paronychia, nail hyperkeratosis, verrucous lesions of the nail and proximal fold, and longitudinal destruction of the nail plate of the right big toe. Nail biopsies showed epithelioid and giganto-cellular granulomas without caseous necrosis. The rest of the workup found lung, lymph node and joint involvement in both patients, in addition to sinus involvement in women. The diagnosis of systemic sarcoidosis was made and corticosteroid therapy at 1 mg/kg/day was started with good clinical progression.

2. Key Message:

Nail sarcoidosis is uncommon and is a sign of poor prognosis, which may indicate underlying systemic involvement, mainly in the bone, lymph nodes, lungs, joints or sinuses.

INTRALESIONAL METHOTREXATE TO TREAT PSORIATIC NAIL: CASE REPORT

K. Ben Younes^{1*}, N. Litaïem ¹, T. Becha ¹, H. Chaker ¹, M. Lakhal ¹, I. Khelif ¹, M. Jones ¹ and F. Zeglaoui ¹

¹Department of Dermatology, Charles Nicolle Hospital, Tunis, Tunisia

*Corresponding author: Khaoula Ben younes, Department of Dermatology, Charles Nicolle Hospital, Tel: 0021699535220, Email: b-khaoula@hotmail.com

1. Background:

Treatment of psoriatic nail is a real challenge. We report a new case of nail psoriasis successfully treated with intralesional methotrexate injection.

2. Observation:

A 46-year-old woman, with a celiac disease, has been followed for 6 years for psoriasis of the right thumb nail. She had neither skin psoriasis nor scalp lesions. Topical treatment and local triamcinolone injections were ineffective. We opted for an injection of methotrexate into the proximal nail fold. The patient was treated with an injection of 0.1 ml of a 5 mg/2 ml solution. Side effects were limited to pain at the time and after injections. An improvement was noted after the first session. A total cure was seen after 2 months.

3. Key Message:

Psoriatic nail management is difficult. No standardized therapeutic regimen currently exists. Systemic therapy is not the first choice for psoriatic nails because of known adverse effects. Topical therapies are the first-line therapy. Their efficacy is limited. Intralesional injection of methotrexate seems to be an effective and safe method for treating nail psoriasis.

NEVER BIOPSY A HUTSCHINSON'S NAIL SIGN

K. Ben Younes^{1*}, N. Litaïem ¹, N. Daadaa ¹, A. Chamli ¹, T. Becha ¹, M. Jones ¹ and F. Zeglaoui ¹

¹Department of Dermatology, Charles Nicolle Hospital, Tunis, Tunisia

*Corresponding author: Khaoula Ben younes, Department of Dermatology, Charles Nicolle Hospital, Tel: 0021699535220, Email: b-khaoula@hotmail.com

1. Background:

Longitudinal melanonychia is a longitudinally oriented band of brown-black pigment in the nail. The following case demonstrates how a poor biopsy technique of a longitudinal melanonychia resulted in a misdiagnosis in a patient with a melanoma.

2. Observation:

A 65-year-old male patient presented with a band of longitudinal melanonychia affecting his right thumb. A cutaneous punch biopsy of Hutchinson's sign from the pigmented hyponichium was taken. The histopathology showed a benign lesion. Ten years later, he was presented with a total blackish coloration of his thumb nail and surrounding regions. The diagnosis of metastatic melanoma was rendered. The patient refused any treatment.

3. Key Message:

Hutchinson's sign is a periungual extension pigment from the nail bed and nail matrix onto the surrounding tissues. This sign is used to differentiate between benign and malignant longitudinal melanonychia. Different techniques have been described for the biopsy. Improper biopsy (from the pigmented hyponichium such as our case) can risk obtaining an inadequate specimen so that histopathological examination is compromised.

SUBUNGUAL EXOSTOSIS: ABOUT 12 CASES

Karray M1*, Litaïem N1, Khammouma F1, Lakhal M1, Bacha T1, Jones M1, Zeglaoui F1

1 Department of Dermatology, Charles Nicolle Hospital, Tunisia.

* Manel.karray.zahaf@hotmail.com

Background: Subungual exostosis (SUE) is a rare and benign exophytic growth from the tuft of the terminal phalanx.

Aims and Objectives: We reported epidemiological and clinical features of SUE and we described the surgical technique we used for treatment.

Methods: We conducted a retrospective study about 12 patients between 2016 and 2018. Inclusion criterion was clinical presentation of SUE.

Results: There were 8 females and 4 males. The mean age was 16 years old. There was a history of antecedent trauma in 4 cases. Examination revealed a firm, fixed nodule at the distal end of the nail plate. SUE was anterior in 8 cases and distolateral in 4 cases. It was localized in the big toe (8 cases), other toes (3 cases) and the thumb (1 case). Radiography was consistent with SUE. A nail elevator was used to loosen the nail folds from the nail plate and to separate the nail plate from the nail bed below. After removal of the nail plate, the exostosis was completely exposed. The nail bed was dissected off of the bony lesion with the nail elevator. A small osteotome was used to remove the exostosis from the distal phalanx. The nail bed was then approximated and repaired. The nail plate was sutured back into place. Histological examination was consistent with exostosis.

Conclusions: Surgical excision is the appropriate management of SUE. Although many techniques are described in the literature, our approach is simple and efficient, with good cosmetic results.

ORAL MINOXIDIL EFFECT ON NAIL GROWTH

Waleed Alsalhi, MD*1, Afnan Aljaloud, Ph2, Brian Morrison, MD3, Antonella Tosti, MD4

1 Department of Dermatology, College of Medicine, Majmaah University, Al-Majmaah, Kingdome of Saudi Arabia.

2 Department of Pharmacy, Security Forces Hospital, Riyadh, Kingdome of Saudi Arabia.

3Dr Phillip Frost Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine, United States of America.

4 Dr. Phillip Frost Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine, Miami, United States of America.

*Corresponding author: w.alsalhi@mu.edu.sa

1. Background: (11-point boldface)

Oral minoxidil (OM) was first introduced in the 1970s as a treatment for severe refractory hypertension because of its potent vasodilatory qualities. Minoxidil has a relaxant effect on vascular smooth muscle by opening adenosine triphosphate-sensitive potassium channels.¹ Changes in nails blood circulation can affect nails growth rate. Thus, endogenous and exogenous factors that increase blood circulation to nails like hyperemia, warm environment, and nail biting can accelerate growth. On the other hand, ischemia is associated with a marked reduction in the rate of nail growth.²

Topical minoxidil has been reported to accelerate the nail growth rate. One study done in Thailand, evaluated the effect of topical minoxidil 5% twice daily on index and ring fingers of 32 participants. They found an increase nail growth rate of 4.27 mm/month (treated nails) as compared with 3.91 mm/month in the untreated nails ($P = 0.003$).³ Another, open-controlled study comparing topical minoxidil effect with oral biotin found a positive effect on nail growth rate in patients treated with topical minoxidil.⁴

2. Aims and Objectives:

To our knowledge, there are no published studies on the effects of oral minoxidil on nail growth. Our study aimed to assess the effect of low dose oral minoxidil on the rate of nail growth, thickness, shape, and nail care routine among patients treated with low-dose oral minoxidil for hair diseases using a survey questionnaire.

3. Methods:

After IRB approval, we administered the questionnaire to 17 patients (6 males and 11 females, with an age range between 18 – 62 years.)

4. Results:

Our results revealed a significant difference in nail strength ($p=0.525$), nails growth rate ($p=0.998$), and nails appearance ($p=0.113$) before and after treatment. Some participants noticed that their nails became more rigid and thicker after taking the median dose of 3.75, but the difference was not statistically significant when compared among other categories ($p=0.089$). Results are presented in Tables I and II.

The mechanism by which minoxidil promotes nail growth stimulation is not entirely clear. It is known that minoxidil upregulates the expression of vascular endothelial growth factors in hair follicle dermal papillae, which may occur similarly in the nail apparatus and generate an increase in blood flow and supply.

The chief limitations of our study were the small sample size, short duration and variable dosing regimen.

5. Conclusions:

Oral minoxidil may stimulate nail growth rate, thickness and texture, however, we could not validate it benefit in this small study. Additional studies are needed to further evaluate the therapeutic impact of oral minoxidil on nail growth.

Table 1. "Effect of oral minoxidil doses on the physiology of nails"

Median			
(25th -75th) quartile		Median	
(25th -75th) quartile		p-value	
After starting oral minoxidil have your nails become stronger?			
Yes			
n=6	No		
n=11			
Dose (Milligram)	1.50 (0.60 – 3.125)	1.25 (0.60 – 1.25)	0.525
After starting oral minoxidil, have your nails began growing more quickly?			
Yes			
n=6	No		
n=11			
Dose (Milligram)	1.25 (0.60 – 1.56)	1.25 (0.60 – 1.25)	0.998

After starting oral minoxidil, do you feel your nails look pleasanter?

Yes

n=7 No

n=10

Dose (Milligram) 1.25 (1.25 – 2.50) 0.925 (0.60 – 1.25) 0.113

Table 2. “Median oral minoxidil dose on any changes to nails”

Median

(25th -75th) quartile

n=12

Did not notice Median

(25th -75th) quartile

n=2

Harder & Thicker Median

(25th -75th) quartile

n=2

Harder Median

(25th -75th)

quartile

n=1

Slight change in color p-value

Dose 0.925 (0.60 – 1.25) 3.75 (2.50 – 3.75) 1.25 (1.25 – 1.25) 1.25 (1.25 –
1.25) 0.089

References:

1. Meisheri KD, Cipkus LA, Taylor CJ. Mechanism of action of minoxidil sulfate-induced vasodilation: a role for increased K⁺ permeability. *J Pharmacol Exp Ther*. 1988;245(3):751-760.
2. Bean WB. Nail growth. Thirty-five years of observation. *Arch Intern Med*. 1980;140(1):73-76. doi:10.1001/archinte.140.1.73
3. Aiempanakit K, Geater A, Limtong P, Nicoletti K. The use of topical minoxidil to accelerate nail growth: a pilot study. *Int J Dermatol*. 2017;56(7):788-791. doi:10.1111/ijd.13620
4. Garbers LEFM, Miola AC, Dias PCR, Miot LDB, Miot HA, Schmitt JV. Efficacy of 2.5 mg oral biotin versus 5% topical minoxidil in increasing nail growth rate. *Exp Dermatol*. 2021;30(9):1322-1323. doi:10.1111/exd.14316

COSMETICS

INTERMITTENT INVOLUNTARY SPASM WITH XEOMIN® INJECTION OF THE FACE RESOLVED AFTER CHANGE OF THE TOXIN

De Bedout V, M.D1*, Viera M, M.D1,2.

1Dr Phillip frost Department of Dermatology and cutaneous Surgery, University of Miami Miller School of Medicine, USA

2Doral Dermatology Group, USA

*Corresponding author: vxd234@med.miami.edu

1. Background: Botulinum toxin injections are widely used in dermatology and are considered the leading non-surgical cosmetic procedures.(1) Botulinum toxin binds to the motor nerve axon terminal through its heavy chain and is then incorporated to the nerve cell by endocytosis subsequently interfering with the release of acetylcholine causing functional denervation.(2) Different types of botulinum toxin are used. Xeomin® (incobotulinumtoxin A) and Jeuveau® (isprabotulinumtoxin A) are both botulinum toxins A widely used in dermatology for facial rejuvenation. Adverse reactions associated with the use of botulinum toxin include asymmetries, bruising, headaches, nausea, ptosis, pain at the injection site, accentuation of the fat pad under the lower eyelids, drooping of the lower eyelid, incompetence of the orbicularis oris muscle, diplopia, paralysis of the rectus lateralis oculi, dysphagia and dry eye syndrome.(1) Muscular spasms secondary to Botulinum toxin injections are rare. One case described a patient with painful periods of spasm of the corrugator muscle lasting 5 to 20 seconds each and occurring 48 hours after injection with botulinum toxin A.(1) (FERREIRA) Local injection of botulinum toxin for facial spasms of multiple causes have been reported in the English literature with favorable results and clinical improvement evidenced 2 to 4 weeks after the injection.(2, 3) To our knowledge, this is the only report of intermittent painless spasms secondary to Xeomin® use that resolved after injecting a different type of the toxin.

2. Observation: A 44-year-old female presented to our clinic for botulinum toxin injection of the forehead. She was injected with 4 cc at 0.6 U/0.1 cc of Xeomin® on the glabellar complex, forehead, inferior lateral orbicularis oculi and periorbital skin a total of 24 units. The patient was instructed not to lie down for 4 hours and limit physical activity for 24 hours. She was next seen 1 month after for a touch-up and she was injected under the same protocol a total of 4 units. Eight weeks after the first treatment the patient notices painless intermittent involuntary contractions of the glabellar complex on the injected area without any other associated symptom. The decision was made to change the toxin and two weeks later, she was injected with 1.2 U/0.1cc of Jeuveau® on her forehead and glabellar complex a total of 26 units. One week after this new regimen the patient noticed a significant improvement of her symptoms without further adverse events.

3. Key Message: Change on the botulin toxin type for the treatment of associated intermittent muscular spasms could be a useful, safe and cost-effective therapeutic strategy.

References

1. Ferreira MC, Salles AG, Gimenez R, Soares MF. Complications with the use of botulinum toxin type a in facial rejuvenation: report of 8 cases. Aesthetic Plast Surg. 2004;28(6):441-4.

2. Oyama H, Ikeda A, Inoue S, Nakashima Y, Shibuya M. Local injection of botulinum toxin type A for hemifacial spasm. *Neurol Med Chir (Tokyo)*. 2002;42(6):245-8; discussion 8-9.
3. Frei K, Truong DD, Dressler D. Botulinum toxin therapy of hemifacial spasm: comparing different therapeutic preparations. *Eur J Neurol*. 2006;13 Suppl 1:30-5.

DIET AND SUPPLEMENTS - IS IT WORKS?

1st Beata Bergler-Czop¹ 2nd Kornelia Pietrauska² and 3rd Ligia Brzezińska-Wcisło^{2,*}

Department of Dermatology Medical Univeristy of Silesia, Katowice, Poland

*Corresponding author: bettina2@tlen.pl

1. Background:

Patients with hair loss often inquire whether nutritional supplements can help restore hair growth or prevent further hair loss. In fact, many will start dietary supplements without consultation in the hope that the supplements will help. The unregulated supplement industry also capitalizes on this population's vulnerability. While hair follicles are among the most metabolically active in the body, and hair growth may be impacted by calorie and protein malnutrition as well as micronutrient deficiency, the links are complex.

Nutritional deficiency may impact both hair structure and hair growth. Effects on hair growth include acute telogen effluvium (TE), a well-known effect of sudden weight loss or decreased protein intake, as well as the diffuse alopecia seen in niacin deficiency. Studies have also reported potential associations between nutritional deficiency and chronic TE, androgenetic alopecia (AGA), female pattern hair loss (FPHL), and alopecia areata (AA)

2. Observation:

Iron deficiency (ID) is the world's most common nutritional deficiency and is a well-known cause of hair loss. What remains unclear is what degree of ID may contribute to hair loss.

Zinc deficiency may be either inherited or acquired and may affect multiple organ systems. Patients may experience diarrhea, immunological effects, and delayed wound healing. Abnormalities in taste and smell may occur. Cutaneous effects include acral and periorificial dermatitis, while hair changes include TE and brittle hair.

Deficiency of the polyunsaturated essential fatty acids linoleic acid (an omega-6 fatty acid) and alpha-linolenic acid (an omega-3 fatty acid) can result from inappropriate parenteral nutrition and malabsorption disorders such as cystic fibrosis. Hair changes include loss of scalp hair and eyebrows as well as lightening of hair. Unsaturated fatty acids may modulate androgen action by inhibition of 5 α -reductase, similar to the drug finasteride. Additionally, arachidonic acid, an omega-6 fatty acid, may promote hair growth by enhancing follicle proliferation

3. Key Message:

While multiple nutrient deficiencies may result in hair loss, screening for such deficiencies must be guided by the history and physical exam. Nutrient deficiencies may arise due to genetic disorders, medical conditions, or dietary practices.

RESOLUTION OF HYPERPIGMENTATION SECONDARY TO LASER WITH INTRADERMAL INJECTIONS OF TRANEXAMIC ACID

De Bedout V, M.D1*, Viera M, M.D1,2

1Dr Phillip frost Department of Dermatology and cutaneous Surgery, University of Miami Miller School of Medicine, USA

2Doral Dermatology Group, USA

*Corresponding author: vxd234@med.miami.edu

1. Background: Hyperpigmentation after laser treatments is a cause of concern. Although several therapies are used for this complication, its treatment remains a great challenge. Tranexamic acid is a plasmin inhibitor with topical and oral formulations which is used in Dermatology for the treatment of pigmented dermatosis. Injected forms of tranexamic acid have been recently studied for the treatment of melasma, and its efficacy has been compared with topical hydroquinone.^{1,2} To our knowledge, only one study evaluated the preventive effects of injected tranexamic acid therapy in reducing the risk of hyperpigmentation after Q-switched 532-nm Nd:YAG laser reporting a significant reduction of the melanin index in the treatment group ($P=0.025$).³ However, the effects of intralesional tranexamic acid for the treatment of secondary hyperpigmentation after laser have not been reported to date.

2. Observation: A 56-year-old female presented to our clinic with history of ill-defined patches of hyperpigmentation of her face after non-ablative fractional laser followed by intense-pulse light therapy. No birth control therapies were reported. 3 sessions of Q-skin science Miami peel 2 passes 5 minutes apart were tried every 4 weeks without response. Topical tranexamic acid plus mandelic acid pads were also unsuccessful. Finally, a spot treatment of 10ml/cc tranexamic acid was injected intradermally followed by two additional sessions 2 months apart. On each session, 0.3 cc of the medication was injected per cheek. Clinical resolution was evidenced after the second injection without adverse events.

3. Key Message: Intradermal injections of tranexamic acid could be a useful, safe and cost-effective therapeutic strategy for secondary hyperpigmentation as seen in this case.

1. Pazyar N, Yaghoobi R, Zeynalie M, Vala S. Comparison of the efficacy of intradermal injected tranexamic acid vs hydroquinone cream in the treatment of melasma. Clin Cosmet Investig Dermatol. 2019;12:115-122.

2. Lee JH, Park JG, Lim SH, et al. Localized intradermal microinjection of tranexamic acid for treatment of melasma in Asian patients: a preliminary clinical trial. Dermatol Surg. 2006;32(5):626-631.

3. Sirithanabadeekul P, Srieakpanit R. Intradermal tranexamic acid injections to prevent post-inflammatory hyperpigmentation after solar lentigo removal with a Q-switched 532-nm Nd:YAG laser. J Cosmet Laser Ther. 2018;20(7-8):398-404.

FILLER COMPLICATIONS – WHAT WE SHOULD KNOW?

Monika Fida* 1, Vladimir Filaj1, Laerta Pupo2, Ritjana Mala2, Brunilda Bardhi2

1Dermatology & Plastic Surgery Department, University of Medicine of Tirana, Albania.

2 Dermo- aesthetic Private Clinic, Tirana, Albania

*Corresponding author:monikafida@gmail.com

Background: Aesthetic procedures especially noninvasive procedures are increasing incredibly in numbers during the last 5 years. Either during the pandemic period these procedures are the most asked and performed procedures. Each of this procedure has the risk for complications that are noticed and reported. Good and deep training in applications technique and anatomy knowledge's is accompanied by a small number or no complications at all.

Aim and Objectives: To emphasize the crucial role of deep education in applying a filler. To demonstrate different cases of filler complications.

Material and Method: Patients treated with hyaluronic acid injections (Fillers) who developed complications after the procedure. The selected sample in this referral is based on our experience from our clinical cases encountered in the daily practice of 15 years.

Results: Complications after hyaluronic acid injections are classified as immediate complications and delayed complications. Another classification are common complications and rare complications. The number of complications immediately after the procedure is larger compared to the number of complications that develop later complications and includes: pain, discomfort, edema, hematoma, infections, nodules, vascular-necrosis compression, blindness. The number of delayed complications is smaller and includes: infections, granulomas, filler migration.

Conclusions: Every single injection procedure contains the possibility of developing complications and for this reason an ideal filler does not exist. Hyaluronic acid injection procedures are safe and effective procedures if applied by trained experienced medical personnel. Having strong knowledge of anatomy and acquiring updated information on this sub-specialty, especially on the treatment of complications, is a necessity for the medical staff that performs these procedures. Aesthetic medicine is the bridge between medicine and art and should be entrusted to experts!

Surname	Name	Title	Topic
Abdelmouttalib	Asmae	THE DERMOSCOPIC FEATURES OF SCALP INVOLVEMENT DURING PEMPHIGUS	Trichoscopy
Aimoldina	Alma	CLINICAL ANALYSIS OF NON-CICATRICAL FORMS OF ALOPECIA	Trichoscopy
Aimoldina	Alma	TO THE ISSUE OF TIMELY DIAGNOSIS OF CICATRICAL ALOPECIA	Trichoscopy
Al-Salhi	Waleed	ORAL MINOXIDIL EFFECT ON NAIL GROWTH	Trichoscopy
Alvarez Perez	Gabriela Rossana	SUCCESSFUL TREATMENT OF LICHEN PLANUS PIGMENTOSUS ASSOCIATED WITH FRONTAL FIBROSING ALOPECIA WITH LOW DOSE OF ORAL METHOTREXATE	Trichoscopy
Amal	Chamli	HAIR DEFECTS ASSOCIATED WITH PILI TORTI	Trichoscopy
Ankad	Balachandra	Evaluation of trichoscopy patterns in alopecia areata, tinea capitis, and trichotillomania: A case series study in the skin of color	Trichoscopy
Ankad	Balachandra	Trichoscopy of cicatricial alopecia: What is new in the skin of color?	Trichoscopy
Annunziata	Maria Carmela	COEXISTENCE OF ALOPECIA AREATA AND FRONTAL FIBROSING ALOPECIA	Trichoscopy

Annunziata	Maria Carmela	ORAL MINOXIDIL FOR THE TREATMENT OF CHEMOTHERAPY INDUCED ALOPECIA	Trichoscopy
Annunziata	Maria Carmela	ORAL MINOXIDIL IN ANDROGENETIC ALOPECIA: OUR EXPERIENCE	Trichoscopy
Arsova	Elena	SCALP THREADING, A NEW TREATMENT OPTION FOR ANDROGENETIC ALOPECIA	Trichoscopy
Asmahane	Souissi	Dermoscopy revealing a case of dermatophytosis of the eyebrow	Trichoscopy
Awatef	Kelati	Twins in trichoscopy	Trichoscopy
Babushkina	Mariia	A CLINICAL CASE OF COMEDO NAEVUS OF THE SCALP IN A 6-YEARS OLD MALE CHILD	Trichoscopy
Barilo	Anna	A CASE OF ALOPECIA AREATA IN PATIENT WITH SEASONAL ALLERGIC RHINITIS	Trichoscopy
Barilo	Anna	A CASE OF FOOD ALLERGY IN PATIENT WITH SCALP PSORIASIS	Trichoscopy

Barilo	Anna	PATTERNS OF SENSITIZATION TO FOOD AND INHALED ALLERGENS AMONG PATIENTS WITH SCALP PSORIASIS	Trichoscopy
Barilo	Anna	THE SENSITIZATION TO FOOD ALLERGENS AMONG PATIENTS WITH SEBORRHEIC DERMATITIS ON SCALP	Trichoscopy
Ben Younes	Khaoula	A RARE ASSOCIATION OF WOOLLY HAIR NEVUS AND EXTENSIVE EPIDERMAL NEVUS	Trichoscopy
Ben Younes	Khaoula	INTRALESIONAL METHOTREXATE TO TREAT PSORIATIC NAIL: CASE REPORT	Trichoscopy
Ben Younes	Khaoula	NEVER BIOPSY A HUTSCHINSON'S NAIL SIGN	Trichoscopy
BENVEGNÚ	ANA MARIA	ALOPECIA AREATA OF EYELASHES: CASE REPORT AND LITERATURE REVIEW	Trichoscopy
Bergler-Czop	Beata	Diet and Supplements - is it works?	Trichoscopy
Buss Venier	Natália Andressa	TRICHOTILLOMANIA: THE IMPORTANCE OF DERMOSCOPIC FEATURES	Trichoscopy

Buss Venier	Natália Andressa	ONYCHOCYTIC MATRICROMA - TWO RARE TUMOR CASES OF THE UNGUEAL UNIT	Trichoscopy
Cantelli	Mariateresa	CO-EXISTENCE OF ALOPECIA AREATA AND ATOPIC DERMATITIS: COULD DUPILUMAB BE THE RIGHT WAY?	Trichoscopy
Cantelli	Mariateresa	DIPHENCYPRONE IN ALOPECIA AREATA: A SUCCESSFULL TREATMENT OPTION	Trichoscopy
Cantelli	Mariateresa	DIPHENCYPRONE IN PEDIATRIC PATIENTS	Trichoscopy
CHAIDEMENOS	GEORGIOS	TRICHOSCOPY OF PEMPHIGUS VULGARIS IN REMISSION. A TOOL FOR TREATMENT-CESSATION DECISION MAKING.? PRELIMINARY RESULTS	Trichoscopy
Chu	Sherman	TREATMENT OF SEVERE ALOPECIA AREATA WITH TOFACITINIB: A RETROSPECTIVE STUDY	Trichoscopy
Corball	Melisa	FACIAL LESIONS IN A PATIENT WITH FRONTAL FIBROSING ALOPECIA. CASE REPORT.	Trichoscopy
Cua	Val Constantine Say	Trichotillomania masked by diffuse alopecia areata: a case report	Trichoscopy

da Luz Silva	Isadora	THE ROLE OF ULTRAVIOLET-ENHANCED TRICHOSCOPY ON THE EARLY DIAGNOSIS OF TINEA CAPITIS	Trichoscopy
da Luz Silva	Isadora	FAMILIAL KOILONYCHIA: CASE REPORT OF A PATIENT FROM A FAMILY WITH A CONSANGUINITY HISTORY	Trichoscopy
de bedout	valeria	INTERMITTENT INVOLUNTARY SPASM WITH XEOMIN® INJECTION OF THE FACE RESOLVED AFTER CHANGE OF THE TOXIN.	Trichoscopy
De Bedout	Valeria	RESOLUTION OF HYPERPIGMENTATION SECONDARY TO LASER WITH INTRADERMAL INJECTIONS OF TRANEXAMIC ACID.	Trichoscopy
DE VILLAFRANCA	ANDREA	HAIR HYPOPIGMENTATION, SECONDARY TO PAZOPANIB A MULTIKINASE INHIBITOR	Trichoscopy
Dhurat	Dr. Rachita	Utility of Follicular Unit Extraction in Cicatricial Alopecia- Histopathological and Ultrasound Biomicroscopic correlational study	Trichoscopy
Doche	Isabella	PRIMARY SCARRING ALOPECIA FOLLOWING SCALP SURGERY: REPORT OF TWO CASES	Trichoscopy
Doche	Isabella	SCALP DISCOID LUPUS ERYTHEMATOSUS EVOKED BY ALOPECIA AREATA: A POSSIBLE ROLE FOR MxA ACTIVATION? – CASE REPORT	Trichoscopy

Drago	Fernnda	ASSOCIATED USE OF TEST PRODUCTS INCREASES PERFORMANCE IN THE STRENGTHENING OF NAILS WHEN COMPARED TO THE USE OF ONLY ONE PRODUCT	Trichoscopy
Dubrovka	Elina	How important is trichoscopy in diagnostics of loose anagen syndrome?	Trichoscopy
Eisinger	Amanda	TRICHOSCOPY.NET: A NEW ONLINE PLATFORM FOR TRICHOSCOPY EDUCATION	Trichoscopy
El Hadadi	Farah	A severe case of lichen planopilaris mimicking a Keratosis follicularis spinulosa decalvans.	Trichoscopy
ELMANSOURI	Meriem	Elkonyxis in dermoscopy	Trichoscopy
ELMANSOURI	Meriem	nails in child s alopecia areata	Trichoscopy
fatma	sahli	Alopecia in Vitamin D-dependent rickets	Trichoscopy

Fernandes Melo	Daniel	Pressure-induced alopecia: presence of thin hairs as a trichoscopic clue for the diagnosis	Trichoscopy
Fernandes Melo	Daniel	Concordance among in vivo reflectance confocal microscopy, trichoscopy and histopathology in the evaluation of scalp discoid lupus	Trichoscopy
Fida	Monika	Filler complications- what we should know?	Hair disorders
Gaggino	Maria Paz	DISSECTING CELLULITIS OF THE SCALP, A CASE REPORT.	Hair disorders
Giacalone	Serena	EROSIVE PUSTULAR DERMATOSIS OF THE SCALP INDUCED BY GEFITINIB	Hair disorders
Hamich	Soumaya	Generalized tufted hair folliculitis	Hair disorders
Hamich	Soumaya	TRICHOTILLOMANIA TRIGGERED BY A CYST OF THE SCALP: A CASE REPORT	Hair disorders
Hela	CHAKER	A confusing dissecting cellulitis of the scalp	Hair disorders
Ho	Valerie Pui Yoong	Suspected Recurrent Alopecia Areata Incognito With Acute Respiratory Tract Infections in a Healthy Child	Hair disorders

Jarsania	Deep	"CLUSTER OF STAR APPEARANCE" A NEW TRICHOSCOPY MARKER FOR DIAGNOSIS OF ATRICHIA CONGENITA WITH PAPULAR LESION	Hair disorders
Jarsania	Deep	AZATHIOPRINE INDUCED ANAGEN EFFLUVIUM- RARE CASE REPORT	Hair disorders
JOJOA CHIRAN	JHOANA PATRICIA	DEPRESSION OF THE FRONTAL VEINS AFTER INTRALESIONAL CORTICOSTEROID THERAPY FOR FRONTAL FIBROSING ALOPECIA	Hair disorders
Jouini	Wafa	WHEN THE TRICHOSCOPY REVEALS TRACTION ALOPECIA ASSOCIATED TO ALOPECIA AREATA	Hair disorders
Karrakchou	Basma	SCALP SARCOIDOSIS: CLINICAL, TRICHOSCOPIC AND PATHOLOGIC CORRELATION	Hair disorders
KARRAY	MANEL	SUBUNGUAL EXOSTOSIS: ABOUT 12 CASES	Hair disorders
KAUR	ARSHDEEP	CIRCLE HAIRS ON SCALP DERMOSCOPY IN ANDROGENETIC ALOPECIA AS AN INDICATOR OF AUTOIMMUNITY	Hair disorders
Kazandjieva	Jana	A Rare Association of Pili Multigemini and Keratosis Pilaris	Hair disorders

Khammouma	Ferdaous	ATRICHIA WITH PAPULAR LESIONS: A RARE CAUSE OF IRREVERSIBLE ALOPECIA	Hair disorders
Khammouma	Ferdaous	ATRICHIA WITH PAPULAR LESIONS: A RARE CAUSE OF IRREVERSIBLE ALOPECIA	Hair disorders
Kinoshita-Ise	Misaki	OVERSIZED BLACK DOTS: A UNIQUE TRICHOSCOPIC FINDING SUPPORTING THE DIAGNOSIS OF TRICHOTILLOMANIA BUT NOT OF ALOPECIA AREATA	Hair disorders
Kona	Sradda Naidu	Interesting signs in trichoscopy- "The new kids in the block"	Hair disorders
Kona	Sradda Naidu	A CASE OF ACQUIRED TRICHORRHEXIS NODOSA	Hair disorders
Kozyrenko	Inga	A case of androgenetic alopecia in a young woman	Hair disorders
Kumar	Sukhdeo	"Follicular demise in frontal fibrosing alopecia and lichen planopilaris reveals a stromal etiology rather than appendageal malfunction	Hair disorders
Kurzeja	Marta	CLINICAL AND TRICHOSCOPIC EVALUATION OF ISOTRETINOIN EFFICACY IN LICHEN PLANOPILARIS	Hair disorders

Kyrmanidou	Eirini	Plasmacytoid dendritic cells as initiators in alopecia areata and their clinical biomarkers	Hair disorders
LIMA	LIVIA	Trichoscopic Findings in Syphilitic Alopecia: Report of 4 cases.	Hair disorders
Lortkipanidze	Nino	The Efficacy of Combined Therapy with Intradermal Corticosteroid Injections in Androgenetic Alopecia	Hair disorders
Lyakhovitsky	Anna	Circle hairs in heart transplant patient.	Hair disorders
Lyakhovitsky	Anna	GENERALIZED HYPERTRICHOSIS DURING TREATMENT WITH TOPICAL MINOXIDIL IN A MALE PATIENT- CASE REPORT AND REVIEW OF THE LITERATURE	Hair disorders
Maj	Malgorzata	Onychoscopy of selected diseases entities. From literature to clinical practice.	Hair disorders
Maj	Malgorzata	Squamous cell carcinoma of the nail apparatus.	Hair disorders
Malek	Ben Slimane	diffuse alopecia areata mimicking telogen effluvium in a lupus patient	Hair disorders

MAOUNI	Safae	TRICHOSCOPY OF SCALP WHITE PIEDRA	Hair disorders
MAOUNI	Safae	FRONTAL FIBROSING ALOPECIA: MOROCCAN STUDY FROM THE UNIVERSITY HOSPITAL OF RABAT	Hair disorders
MAOUNI	Safae	DIGITAL FIBROKERATOMA WITH SUBUNGUAL EXOSTOSIS	Hair disorders
MAOUNI	Safae	NAIL SARCOIDOSIS	Hair disorders
Mareeva	Anastasia	ANALYSES OF 29 CASES OF TRICHOTILLOMANIA: TRICHOSCOPIC FEATURES.	Hair disorders
Mareeva	Anastasia	COMPULSIVE TRICHOSES: CLINICAL CASES, TRICHOSCOPIC FEATURES.	Hair disorders
Mariem	Lakhal	Onychomycosis treatment in Tunisia	Hair disorders
Marta	Kurzeja	CLINICAL AND TRICHOSCOPIC EVALUATION OF ISOTRETINOIN EFFICACY IN DISSECTING CELLULITIS	Hair disorders

Martinele	Lina	A CASE OF ACQUIRED TRICHORRHEXIS NODOSA DUE TO QUETIAPINE USE	Hair disorders
Martinez	Hugo	TRACTION ALOPECIA AMONG MEXICAN POPULATION	Hair disorders
Mohammed	Marwa Said Mahmoud Mohammed	Trichoscopic Evaluation of Frontal Hairline Recession in Egyptian Female Patients	Hair disorders
Mohammed	Marwa Said Mahmoud Mohammed	Onychomycosis: Correlation between the dermoscopic patterns and fungal culture	Hair disorders
Mrugacz	Małgorzata	ABSENCE EYEBROWS AND EYELASHES AT BIRTH DUE TO BIOTINIDASE DEFICIENCY	Hair disorders
MUKHERJEE	SAMIPA SAMIR	SCALP DYSESTHESIA IN A 9 YEAR OLD DIAGNOSED ON TRICHOSCOPY	Hair disorders
MUKHERJEE	SAMIPA SAMIR	TRICHOSCOPY CLINCHES THE DIAGNOSIS OF NEONATAL SCURVY	Hair disorders
MUKHERJEE	SAMIPA SAMIR	ALOPECIA AREATA AND TRICHOTILLOMANIA OVERLAP IN PEDIATRIC AGE GROUP- AN UNDER RECOGNISED SPHERE?	Hair disorders

Mukomela	Liubov	Comparative characteristics of combined treatment methods for seborrheic dermatitis of the scalp	Hair disorders
Najla	Daadaa	Folliculitis keloidalis nuchae : Clinical and trichoscopic study	Hair disorders
Nikam	Balkrishna	Roundish structures in trichotillomania : A new observation in Trichoscopy	Hair disorders
Nikam	Balkrishna	Roundish structures in trichotillomania : A new observation in Trichoscopy	Hair disorders
Oguzoglu	Tayfun	AUTOLOGOUS MICROGRAFTING TECHNOLOGY IN COMBINATION WITH FUE HAIR TRANSPLANT	Hair disorders
PAPANIKOU	SOFIA	Trichoscopic findings in 29 men with FFA. Experience from a single center in Greece.	Hair disorders
PAPANIKOU	SOFIA	Trichoscopic findings in 300 FFA patients. The experience from a single center in Greece.	Nail disorders
PAPANIKOU	SOFIA	Epidemiological findings of 300 FFA patients. The results from a single center in Greece.	Nail disorders

PAPANIKOU	SOFIA	How the extended Alopecia Areata affects the quality of life and the emotional wellbeing of 135 patients.	Nail disorders
Patrì	Angela	PERMANENT CHEMOTHERAPY-INDUCED ALOPECIA: A COMPREHENSIVE DIAGNOSTIC ASSESSMENT THROUGH TRICHOSCOPY, CONFOCAL MICROSCOPY AND HISTOLOGY	Nail disorders
Patrì	Angela	COMBINATION THERAPY WITH HYDROXYCHLOROCHINA AND FINASTERIDE FOR CONCOMITANT FRONTAL FIBROSING ALOPECIA AND LICHEN PLANOPILARIS IN A MAN.	Nail disorders
Patrì	Angela	HAIR IN DERMATOLOGIC DISEASE	Nail disorders
Pedrinazzi	Christian	NEW ACQUISITIONS IN THE TREATMENT OF ONYCHOMYCOSIS WITH PHOTODYNAMIC THERAPY	Nail disorders
Pirogova	Anna	Dissecting cellulitis of the scalp mimicking kerion in a patient who returned from Wuhan	Nail disorders
Quaranta	Maria	The role of gut microbiota in Alopecia Areata patients	Nail disorders
Ramadan	wafaa	Short hair disorders in children “ from trichoscopy to therapy “	Nail disorders

Ramirez Mendez	Tania Gissel	PERIUNGUEAL PIGMENTED BOWEN'S DISEASE, AN UNUSUAL LOCATION. CASE REPORT	Nail disorders
Ran	Xin	The observations from trichoscopy and scanning electronic microscope of two sisters suffered kerion caused by Trichophyton mentagrophytes	Nail disorders
Recoder	Manuela	Lichen Planopilaris Overlap With Female Pattern Hair Loss: Trichoscopy Findings	Nail disorders
Recoder	Manuela	Pressure-Induced Alopecia: Trichoscopy Findings	Nail disorders
Recoder	Manuela	Hamilton-Norwood type VII Androgenetic Alopecia Successfully Treated With Mesotherapy	Nail disorders
Recoder	Manuela	Therapeutic success in Fibrosing Frontal Alopecia: Case Report	Nail disorders
Rinaldi	Fabio	EARLY DIAGNOSIS OF LICHEN PLANUS PILARE: FROM THE CLINIC TO TRICHOSCOPY TO MICROBIOTA	Cosmetics
Rinaldi	Fabio	EARLY DIAGNOSIS OF LICHEN PLANUS PILARE: FROM THE CLINIC TO TRICHOSCOPY TO MICROBIOTA	Cosmetics

Rossi	alfredo	A new therapeutic approach in the fibrosis' treatment in cicatricial alopecia: the Skin patting	Cosmetics
Rouai	Meriem	Tinea Capitis in an elderly woman: Trichoscopy as a clue to the diagnosis	Trichoscopy
Saceda-Corralo	David	CATCH THEM ALL: TRICHOSCOPIC DIAGNOSIS OF EARLY FRONTAL FIBROSING ALOPECIA	Trichoscopy
Sachdeva	Muskaan	COSMETIC COLOR PRODUCTS CAN MIMIC PATHOLOGICAL TRICHOSCOPIC FINDINGS: A RETROSPECTIVE ANALYSIS AND REPRODUCING TEST USING LEMON'S SKIN	Trichoscopy
Safonova	Larisa	A multifaceted approach to the treatment of non-scarring alopecia using peptide fullerene therapy	Trichoscopy
SALAS	SARA L	An Overview on Scalp Micropigmentation in combination with Hair Transplant for severe hair loss cases	Trichoscopy
Salas-Callo	Corina Isabel	VERY LOW DOSE ORAL MINOXIDIL AS MONOTHERAPY IN MALE ANDROGENETIC ALOPECIA	Trichoscopy
Sánchez-Dueñas	Luis Enrique	Patterned trichotillomania in androgenetic alopecia	Trichoscopy
Sayyad	Dr Ajara Tabassum Hamid	SIMPLE ECONOMICAL INNOVATIONS IN DERMOSCOPY OF HAIR, NAIL, MUCOSA	Hair disorders
Sayyad	Dr Ajara Tabassum Hamid	AN UNUSUAL CASE OF STEATOCYSTOMA MULTIPLEX ON FACE AND SCALP: A CLINICOPATHOLOGIC AND DERMOSCOPIIC REPORT	Hair disorders
Schmidt Dorneles	Ana Cristina	SECONDARY SYPHILIS IN SCALP - REPORT OF CASE AND MAIN FINDINGS IN TRICHOSCOPY	Hair disorders
Schmidt Dorneles	Ana Cristina	LUPUS ERYTHEMATOUS CHRONIC CUTANEOUS SCALP WITH SEBORRHEIC KERATOSIS-LIKE PRESENTATION	Hair disorders

Schmidt Dorneles	Ana Cristina	SUBUNGUAL ACANTHOLYTIC DISKERATOTIC ACANTHOMA - REPORT OF CASE	Hair disorders
Sicińska	Justyna	HAIRLOSS AS A MANIFESTATION OF MALIGNANCY	Hair disorders
Sicińska	Justyna	LASH COMPARATIVE TRICHOSCOPY IN MONITORING LID MARGIN LESION GROWTH	Hair disorders
Sicińska	Justyna	MIDLINE DENSITY PROFILE – TRICHOSCOPIC EVALUATION OF HAIRLINE AREA. A PILOT STUDY.	Hair disorders
souissi	asmahane	TRICHOSCOPY OF SCALP SARCOIDOSIS: A USEFUL CLUE TO DIAGNOSIS	Hair disorders
souissi	asmahane	NAIL CHANGES IN CHRONIC KIDNEY FAILURE	Hair disorders
Starace	Michela	CLINICAL STUDY ON THE EFFECTIVENESS AND TOLERABILITY OF PREFORMED GROWTH FACTORS VEHICULATED THROUGH IONOPHORESIS ON PATIENTS WITH ANDROGENETIC ALOPECIA AND TELOGEN EFFLUVIUM.	Hair disorders
Surve	Ravina	INEXPENSIVE MODIFIED CROSS-POLARIZED TECHNIQUE TO EVALUATE TRICHOGRAM.	Hair disorders
Surve	Ravina	MONILETHRIX – A RARE INHERITED HAIR SHAFT DISORDER : DIAGNOSIS BY TRICHOSCOPY	Hair disorders
Surve	Ravina	ONYCHOSCOPY MADE EASIER! - THE INNOVATIVE USE OF AN OINTMENT CARTON FOR EASY VISUALIZATION OF THE NAIL APPARATUS	Nail disorders
Svigos	Katerina	Frontal fibrosing alopecia in skin of color patients: Demographics and clinical profile	Nail disorders
Szmurło	Agnieszka	The rare case of breast cancer metastasis located on the scalp diagnosed by trichoscopy examination.	Nail disorders

Tabka	Mariem	LICHEN PLANOPILARIS TRICHOSCOPY: A RETROSPECTIVE STUDY OF 8 CASES	Nail disorders
Takáčová	Gabriela	VASCULAR PATTERN- A NOVEL TRICHOSCOPY PARAMETER IN ALOPECIA NEOPLASTICA	Nail disorders
Talida	Vulcan	Linear scleroderma "en coup de sabre" in a 9 year old child	Hair disorders
Tamashunas	Nina	PREVALENCE OF COMORBIDITIES IN PEDIATRIC ALOPECIA AREATA	Hair disorders
Tazi Saoud	Zineb	TRICHOSCOPY IN CHILDREN'S ALOPECIA AREATA : SERIES OF 20 CASES	Hair disorders
Therianou	Anastasia	Pili Torti and Loose Anagen Syndrome following bone marrow transplant	Hair disorders
Ugonabo	Nkemjika	ASSESSING LABORATORY WORK UP OF ALOPECIA AMONG PATIENTS OF VARYING SKIN TYPES: A SINGLE-CENTER RETROSPECTIVE CHART REVIEW	Hair disorders
Vastarella	Maria	EVALUATION OF EFFICACY AND SAFETY OF FINASTERIDE 2.5 MG IN POSTMENOPAUSAL WOMAN WITH ANDROGENETIC ALOPECIA	Trichoscopy
Vastarella	Maria	Facial Papules in Frontal Fibrosing Alopecia: a case report	Hair disorders
Vastarella	Maria	The effect on the quality of life of using prosthesis in chemotherapy-induced alopecia: an open-label study	Trichoscopy
Vedamurthy	Maya	AWARENESS, KNOWLEDGE AND PERCEPTIONS AMONG THE SPECIALITY DERMATOLOGISTS FOR THE CLINICAL BENEFITS OF HAIR GROWTH SERUM	Trichoscopy
Vincenzi	Colombina	EFFICACY OF AUTOLOGOUS MICROGRAFT TREATMENT FOR ANDROGENETIC ALOPECIA	Trichoscopy
Vollono	Laura	REFLECTANCE CONFOCAL MICROSCOPY PERFORMED ON "EN COUP DE SABRE" MORPHEA OF THE FACE AND	Trichoscopy

		SCALP: A USEFUL ANCILLARY TECHNIQUE	
Westphal	Danielle Cristine	TRICHOSCOPIC FINDINGS IN SYPHILITIC EYEBROW ALOPECIA: REPORT OF 5 CASES	Hair disorders
Yacoubi	Jihed	DERMOSCOPY PATTERNS OF ALOPECIA RESULTING FROM ACUTE AND CHRONIC LUPUS ERYTHEMATOSUS	Hair disorders
Yin	Bin	DERMOSCOPY AND FUNGAL FLUORESCENCE STAINING DETECT INFANT KERIONS WITH SUCCESSFUL TREATMENT OF ITRACONAZOLE	Hair disorders
You	Zimeng	Identification of clinical parameters associated with nail psoriasis severity and therapeutic efficacy	Hair disorders
Zhelonkin	Anton	Lichen planopilaris non- polarized dermoscopy features	Cosmetics
Żychowska	Magdalena	TRICHOSCOPIC FINDINGS IN ALOPECIA RELATED TO EPIDERMAL GROWTH FACTOR RECEPTOR INHIBITOR THERAPY	Hair disorders
Żychowska	Magdalena	Onychomadesis secondary to hand-foot-and-mouth disease	Nail disorders