A Randomized, Double-Blind, Vehicle-Controlled, Bilateral Comparison Trial of Bexarotene Gel 1% versus Vehicle Gel in Combination with Narrow-Band UVB Phototherapy for Moderate to Severe Psoriasis Vulgaris

M.A. Maglocco, K. Pandya, V. Dombrovskiy, L. Christiansen, Y. Wong, A.B. Gottlieb
New Brunswick, N.J., USA
[J Am Acad Dermatol 2006;54:115-118]

We report the results of a randomized, vehicle-controlled, bilateral comparison pilot study of bexarotene gel 1% with narrow-band UVB (NBUVB) phototherapy for moderate to severe psoriasis. In all, 9 patients applied drug or vehicle gel to comparable target lesions up to twice daily for 10 weeks. NBUVB was initiated 2 weeks after topical therapy had begun. Limitations include small sample size and interim analysis. Based on the analysis of target lesion scores, bexarotene gel 1% NBUVB was significantly more effective than placebo/NBUVB.

Etanercept and Demyelinating Disease in a Patient with Psoriasis

S.A. Sukal, L. Nadiminti, R.D. Granstein
New York, N.Y., USA

The tumor necrosis factor α antagonist (TNF-α) etanercept has been approved for the treatment of rheumatoid arthritis, juvenile rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis and psoriasis. Earlier reports on the use of etanercept or infliximab in patients with rheumatoid arthritis, psoriatic arthritis or juvenile rheumatoid arthritis suggested an increased risk of demyelinating disease. It is imperative that dermatologists have a keen awareness of this possible adverse event given the increased use of this class of drugs. We report a case of demyelinating disease occurring in a patient treated for psoriasis. The relation of TNF-α antagonist therapy to demyelinating disease/multiple sclerosis is explored. It is recommended that patients be diligently screened before starting TNF-α antagonist therapy and that vigilance for symptoms of demyelinating disease/multiple sclerosis be included in follow-up examinations during treatment with these drugs.

Treatment of Recalcitrant Atopic Dermatitis with Omalizumab

J.E. Lane, J.M. Cheyney, T.N. Lane, D.E. Kent, D.J. Cohen
Macon, Ga., USA

Atopic dermatitis is a common diagnosis that presents a therapeutic challenge. Although multiple therapeutic modalities exist, there is no single monotherapy that has proven exceptional in ameliorating the symptoms of this disease. Current topical and systemic therapeutic options offer benefit but carry varying degrees of adverse effects that often limit their application. We present 3 patients with severe, recalcitrant atopic dermatitis successfully treated with omalizumab.

Skin Excision and Osteophyte: Removal Is Not Required in the Surgical Treatment of Digital Myxoid Cysts

C. Lawrence
Newcastle, UK
[Arch Dermatol 2005;141:1560-1564]

Background: Digital myxoid cysts (DMCs) are ganglia of the adjacent distal interphalangeal joint (DIPJ) caused by leakage of fluid from the joint into the surrounding tissues. The connection between the DIPJ and the cyst can be identified by the injection of methylene blue into the DIPJ. However, the injection of methylene blue into the DIPJ is difficult and time consuming. Based on this understanding of the cause of DMCs, we have used a surgical technique to treat DMCs without the need for skin excision. Herein, we have adapted the technique and demonstrated that precise leakage point identification is not required for treatment success, thus reducing the potential postoperative morbidity, reducing the operative time and simplifying the surgical technique. Design: This was a prospective, open, non-randomized trial of therapy. A skin flap was designed to include the cyst and tissues from the cyst to the DIPJ. No skin excision was required, and no osteophyte removal was attempted. Setting: University dermatology department. Patients: Thirty-two consecutive symptomatic subjects with 26 finger DMCs and 6 toe DMCs. No patient had been previously treated. Main Outcome Measures: Clinical assessment postoperatively and recurrence rate after a minimum follow-up of 8 months. Results: Of the 26 finger DMCs, 24 (92.3%) remained healed at 8 months; and of the 6 toe DMCs, 2 (33.3%) remained healed at 8 months. Conclusions: DMCs are caused by leakage of joint fluid from the DIPJ to the cyst. The leakage point is sealed in the healing process that occurs after a flap is raised and resited. The flap must be designed to include the undersurface of the cyst and the tissues between the DIPJ and the cyst. No skin excision or osteophyte removal is required. The procedure is not recommended for DMCs of the toes.
The Epidemiology of Molluscum Contagiosum in Children
M.A. Dohil, P. Lin, J. Lee, A.W. Lucky, A.S. Paller, L.F. Eichenfield
San Diego, Calif., USA
[J Am Acad Dermatol 2006;54:47–54]

Molluscum contagiosum (MC) is a viral disorder of the skin and mucous membranes characterized by discrete single or multiple, flesh-colored papules. Although MC as a clinical entity is well defined and commonly observed, few data regarding its epidemiology in the pediatric population exist. Our purpose was to collect epidemiologic data on children with MC with regard to age, gender, ethnicity, degree of involvement, relation to pre-existing atopic dermatitis (AD) and immune status. A retrospective chart review was conducted. All subjects were seen at 3 tertiary pediatric dermatology referral centers with 2 of the sites based at a children’s hospital. A total of 302 patient charts with the Current Procedural Terminology code diagnosis of MC seen over a 6- to 8-month period were reviewed. Approximately 80% of the patients were younger than 8 years. The majority of patients (63%) had more than 15 lesions. All but 1 patient were otherwise healthy, as determined by history and clinical examination. Approximately 24% of the patients presented with a history of previous or active coexistent AD. However, children with AD were at risk for an increased number of lesions. These data provide valuable updated information on the demographics and clinical presentation of MC in pediatric patients in the USA. Limitations include that this was a retrospective study with a population limited to tertiary pediatric dermatology referral centers.

Use of High-Dose Acyclovir in Pityriasis Rosea
F. Drago, F. Vecchio, A. Rebora
Genoa, Italy
[J Am Acad Dermatol 2006;54:82–85]

Background: The association of human herpesvirus 6 (HHV-6) and HHV-7 with pityriasis rosea suggests that systemic drugs directed against HHV may hasten the recovery of patients with pityriasis rosea. Objective: The purpose of this study was to verify the efficacy of oral acyclovir in the treatment of pityriasis rosea. Methods: Eighty-seven consecutive patients were treated for 1 week with either oral acyclovir (800 mg 5 times daily) or placebo. In all patients, the time of lesion clearing and the number of new lesions appearing during treatment were recorded. Results: On the 14th day of treatment, 79% of treated patients fully regressed compared with 4% of the placebo group. The lesions cleared in 18.5 days in treated patients and in 37.9 days in the placebo group. Clearance was achieved in 17.2 days in patients treated in the first week from onset and in 19.7 days in the patients treated later. On the 7th day, there were significantly fewer new lesions in patients treated in the first week than in those treated later. Limitations: This trial was neither randomized nor double blind. Objectivity was achieved by counting the lesions. Conclusion: Acyclovir may be effective in the treatment of pityriasis rosea, especially in patients treated in the first week from onset, when replicative viral activity of HHV is probably very high.

Major Histocompatibility Complex Class I Chain-Related Gene A Polymorphisms and Extended Haplotypes Are Associated with Familial Alopecia Areata
N. Barahmani, M. de Andrade, J.P. Sluss, Q. Zhang, M. Duveic
Houston, Tex., USA
[J Invest Dermatol 2006;126:74–78]

Alopecia areata (AA) is characterized by hair loss in patches and may progress to total loss of scalp hair, or total loss of scalp and body hair. The major histocompatibility complex (HLA) is associated with susceptibility to AA as well as other autoimmune diseases. In addition to HLA molecules, non-HLA molecules including the major histocompatibility complex class I chain-related gene A (MICA), a stress-inducible antigen, are also associated with several autoimmune diseases. To investigate associations between AA and the HLA loci, 2 genes and 8 microsatellite markers spanning the HLA region were genotyped. MICA*6 was significantly associated with all phenotypes of AA (p = 0.0083), whereas MICA*5.1 was significantly associated with patchy AA (p = 0.029). Extended haplotype analysis shows the significant associations of haplotypes HLA-DQ1-DR6-MICA*5.1 (p = 0.004) and HLA-DQB1*0201-DR3-MICA*5.1 (p = 0.009) with AA. These results suggest that MICA is both a potential candidate gene and part of an extended HLA haplotype that may contribute to susceptibility to and severity of AA.

Regulatory Role for Krüppel-Like Zinc-Finger Protein Gli-Similar 1 (Gli1) in PMA-Treated and Psoriatic Epidermis
G. Nakanishi, Y.S. Kim, T. Nakajima, A.M. Jetten
Research Triangle Park, N.C., USA
[J Invest Dermatol 2006;126:49–60]

In this study, we analyze the expression and potential function of the Krüppel-like zinc-finger protein Gli-similar protein 1 (Gli1) in normal and inflammatory skin and in the differentiation of epidermal keratinocytes. Gli1 mRNA is not expressed in normal human epidermis but is significantly induced in psoriatic epidermis and in mouse skin upon treatment with the tumor promoter phorbol-12-myristate-13-acetate (PMA). The expression of Gli1 is restricted to the suprabasal layers. These observations suggest that Gli1 expression is associated with hyperplastic, inflammatory epidermis. Consistent with these findings, Gli1 mRNA is not expressed in undifferentiated or differentiated normal human epidermal kerati-
nocytes (NHEK) in culture but is dramatically induced after the addition of PMA or γ-interferon. A similar induction of Glis1 mRNA by PMA treatment was observed in the immortalized epidermal keratinocyte cell line NHEK-HPV, whereas PMA did not induce Glis1 in HaCaT cells or in several squamous cell carcinoma cell lines. To obtain insight into its function, Glis1 and a C-terminal deletion mutant Glis1ΔC were expressed in NHEK-HPV cells and changes in epidermal differentiation and gene expression examined. Microarray analysis revealed that Glis1ΔC promoted PMA-induced epidermal differentiation, as indicated by increased expression of many differentiation-specific genes. This, in association with its induction in psoriasis, suggests that the transcriptional factor Glis1 is involved in the regulation of aberrant differentiation observed in psoriatic epidermis.