A Note from the Editors

DERMATOLOGY + PSYCHOSOMATICS is a journal dedicated to a high scientific standard. Therefore, a review process is a prerequisite for publication of manuscripts. Nevertheless, the editors of the journal feel the need to offer a platform for comments which can be printed without the demand for corrections and adaptation to rather formalistic criteria. To provide the opportunity for the presentation of 'methodologically unstandardized' spontaneous observations in clinical practice / of clinical experience or comments concerning previously published articles we start the new section 'Letters to the Editors' to hereby encourage the interaction among psychodermatology researchers and clinical practitioners. We would be pleased to promote a discussion within the context of psychodermatological issues in a broad sense and to contribute to interdisciplinary discussions.

Furthermore, the section 'Letters to the Editors' can be used to give feedback on articles published in the latest issues of the journal. We are grateful for comments with respect to methodological aspects of the treatises as well as to the results or conclusions drawn by the authors.

We hope that the new section will be taken up with interest and will contribute to a lively and interesting discussion. Last but not least we thank all colleagues and authors for their encouragement to include the new section.

The Editors

Epidemiological-clinical Features of Psoriasis Vulgaris Patients at the Department of Dermato-Venereology in Banja Luka in the Period 1988–1995

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Key Words

Psoriasis · War · Clinical trials

Summary

Introduction: The authors are presenting results obtained by epidemiological studies of psoriatic patients at the department of Dermato-venereology in Banja Luka, during the period from 1988–1995: before war (1988–1991) and during war (1991–1995).

Patients and Methods: All inpatients were thoroughly investigated, but in outpatients only some parameters were analyzed.

Results: A total of 5723 psoriatic patients, 341 (5.96) in-

patients, and 5382 (94.04%) outpatients were treated. In 3176 patients, psoriasis occurred for the first time, and 2547 had a recurrence. Out of 467,215 dermatological patients, 1.22% (5,723) patients were psoriatic, with peak-influx in 1994 for outpatients, and in 1991 and 1995 for inpatients. Only inpatients were analyzed in detail: mean age was 37.33 years (1–76 years), mean age at onset was 27.49 years in males and 26.93 in females. In 1994 there were (34.84%) females and 3729 (65.16%) males treated. This article also presents statistical data of clinical characteristics.

Conclusion: This study reviews some of the epidemiological-clinical trends in connection with war events.

Introduction

Psoriasis is one of the most common dermatoses. It is a chronic skin disease, genetically determined, of unpredictable course and distribution, which is characterized by exudative-inflammatory papules covered with pearl-white parakeratotic scales. Pustulation is possible as well as appearance of pathological changes at nail plates and joints. Provoking factors and state of immune system play an important role in appearance or clinical exacerbation of the disease [10]. It is estimated that 2–4% of mankind are suffering from psoriasis, and it is distributed world-wide [15]. Between 150,000 and 260,000 new psoriatics are found in the USA every year, and the total number of psoriatics is 1–3 millions. Prevalence ranges from 0.5 to 1.5% [21]. In north-eastern parts of Europe the frequency of psoriasis is 1.5–2% [3], in other parts it is 3–7% [3, 25]. Other investigations showed that prevalence of psoriasis ranges from 0.1% to 2.8% [6, 16, 21, 27]. Psoriasis can appear at any age; a female patient who developed psoriasis for the first time at the age of 108 was described in the USA [7]. There are two peaks of the disease: between 16 and 22 years and between 57 and 66 years [8]. The majority of patients are younger than 20 years [26]. Duration of psoriasis can be variable, spontaneous recovery is possible. However, the causes of this are still not clarified.

Aim of this research was to analyze number of patients with psoriasis vulgaris treated at our ward and to determine clinical forms of skin changes in patients with psoriasis.

Patients and Methods

The investigation was conducted as a retrospective study. Patients included in this investigation were treated as out- or inpatients at the Dermato-venereological clinic of the Clinical-Medical center in Banja Luka, Serbian Republic – Bosnia and Herzegovina, from 1988 to 1995. Two groups were formed: the first consisted of patients treated during the war (1992 to the end of 1995); the second included patients treated before war (1988 to the end of 1991).

Questionnaires and dermato-venereological protocols were made for each patient. To obtain all necessary facts about inpatients, hospital histories were used.

Statistical analysis of data included: percental structure (%); arithmetic mean ($\bar{X}$); standard deviation (SD); Chi-square test (χ^2); student t-test; linear correlation coefficient (r) [23]. Statistical analysis of data was performed on an IBM-compatible PC-486 computer, using software Statgraphics 4.0.

Results

Frequency: In the period 1988–1995 a total of 467,215 patients were treated at the at the Dermato-venereological clinic of the Clinical-medical center in Banja Luka; either as outpatients (AMB) or as inpatients (BOL) (Table 1). Of these, 5,723 (1.22%) patients were diagnosed with psoriasis vulgaris (PV).

Table 1. Patients with PV 1988–1995, treated as out- or inpatients

Year	Total number of patient	Number of psoriatic patients	%
1988	120,139	365	0.30
1989	77,837	441	0.57
1990	78,635	443	0.56
1991	59,118	547	0.93
1992	50,052	571	1.14
1993	32,200	955	2.97
1994	21,102	1,723	8.17
1995	28,132	678	2.41
Total	467,215	5,723	1.22

Fig. 1. Frequency of psoriasis in outpatients compared with the total number of outpatients.

Fig. 2. Frequency of psoriasis in outpatients compared with the total number of outpatients.

The smallest number of PV patients was in 1988: 365 (0.30%), while in the same year the number of dermato-venereological patients was the largest (120,139). The largest number of PV patients was recorded in 1994: 1,723 (8.17%), when the total number of dermatological patients was 21,102.

In the period from 1988 to 1995 there were 467,215 of AMB dermato-venereological patients. In the same period there were 5,382 of PV patients and the average frequency of AMB psoriatic patients was 1.16%. Figure 1 shows that the number of psoriatic patients in the AMB group was lowest in 1988 ($n = 343$, 0.29%) and highest in 1994 ($n = 1,699$, 8.18%). The percentage of PV patients increased from 1992 (1.07%) until 1994

Table 2. Psoriatic patients prior to and during war

Patients	Period					
	1991–1995		1988–1991		Total	
	n	%	n	%	n	%
Outpatients	3724	94.83	1658	92.32	5382	94.04
Inpatients	203	5.17	138	7.68	341	5.96
Total	3927	100.00	1796	100.00	5723	100.00

Table 3. Anatomical localization of psoriatic changes before and during the war (BOL)

Localization of skin changes	Period					
	1991–1995		1988–1991		Total	
	n	%	n	%	n	%
Generalized	10	4.93	21	15.22	31	9.09
Limbs	24	11.82	11	7.97	35	10.26
Trunk	28	13.79	21	15.22	49	14.37
Head	41	20.20	23	16.67	64	18.77
Legs	41	20.20	25	18.12	66	19.35
Arms	59	29.06	37	26.81	96	28.15
Total	203	100.00	138	100.00	341	100.00

(8.18%). After this period it decreased and was 2.12% in 1995. In the period from 1988–1995 the total number of BOL dermato-venereological patients was 4,363. Out of these were 341 PV patients. The lowest frequency of psoriasis was recorded in 1988 (4.10%), it was much higher in 1991 (10.42%) and reached the peak in 1995 (12.41%) (Fig. 2). Average frequency was 7.82%.

Table 2 reviews the total number of PV patients prior to and during the war. The number of psoriatic AMB patients during the war (1991–1995) is significantly higher than the number of AMB patients before the war (1988–1991) ($p < 0.01$); the number of psoriatic BOL patients during the war is also significantly higher than the number of BOL patients before the war ($p < 0.01$).

Age distribution: Average age of psoriatic patients was 37.33 years: 35.55 years in female patients and 38.20 in male patients. Average age at the onset of psoriasis was 27.21 years: in females 26.93 and in males 27.29. The largest number of psoriatic patients during war was in the category 30–50 years (2,302), and the lowest number of PV patients before war was in the category over 50 years (32). During the war there were significantly ($p < 0.001$) more patients (59.21%) in the category 30–50 years in the AMB group, than in the period before war (49.22%), while in the category 18–30 years there were less patients (31.98%) than before the war (42.40%).

Sex distribution: In total, 1,994 (34.84%) females and 3,729 (65.16%) males were treated 1988–1995. There is a significant difference in sex distribution of both, AMB and BOL psoriatic patients during and before the war: the number of males was significantly higher ($p < 0.01$) during the war.

Occupation: Most numerous were workers: 3,814 (66.64%), after that pupils (including students): 708 (12.3%), agricultural

workers: 629 (10.99%) and pensioners: 403 (7.04%). There was no difference between during and before the war.

First appearance of the disease and recurrences: There were 3,176 first appearances of psoriasis and 2,547 recurrences. In 1994 the largest number of psoriatics required treatment for the first time: 984 (30.98%), and the smallest in 1988: 174 (5.48%). The largest number of recurrences was recorded in 1994: 739 (29.01%), and the smallest in 1989: 178 (6.99%). In the AMB group there were 2,179 (58.51%) of first appearances of psoriasis and 1,545 (41.49%) of recurrences during the war, while before the war there was a smaller number of first appearances: 907 (54.70%) and recurrences: 751 (45.30%) ($p < 0.001$). In the BOL group of psoriatic patients there was no significant difference in the number of patients with first appearance of psoriasis during and before war ($p > 0.05$). The number of patients with recurrence of psoriasis in the BOL group was significantly higher during than before the war ($p < 0.01$).

Heredity: Data concerning heredity in the AMB group were not obtained, because the disease protocol did not offer such questions. Out of 341 (100%) psoriatic patients in the BOL group, 29 (8.5%) had a positive family history of psoriasis; 11 (37.93%) patients before, and 18 (62.07%) during the war ($p > 0.05$).

Clinical manifestations: The following data are considering only patients in the BOL group, because the protocol for the AMB group did not deal with the clinical manifestations of psoriasis. Clinical manifestations are presented according to anatomical localization (Table 3). In the war period the largest number of patients had psoriatic changes on arms: 59 (29.06%), and the smallest number had the generalized form: 10 (4.93%). Before the war, the largest frequency of psoriatic

changes was on the arms: 37 (26.81%), and the smallest on the limbs: 11 (7.97%). Generalized psoriasis was recorded only in 10 patients (4.93%) during the war. This is significantly lower than before the war ($t = 3.01$; $p < 0.01$).

Discussion

Frequency: Until 1988 only partial studies about epidemiology of psoriasis were performed on the territory of former Yugoslavia [9]. The most profound study was performed in Osijek, where 1.37% PV patients were found [4]. Other authors found similar results as ours among dermato-venereological patients in the region of Novi Sad: 1.36% [24] and 1.42% [19]. The number of PV patients is specified in works of Milakov [22] (5%), Kogoj [20] (1.28–3.41%), and Ramsay [25] (4.89%), but it is not clear whether those data consider in- or outpatients or the total number of dermato-venereological examinations. The percentage of PV patients is increasing since 1992, to be more precise, since one year after the beginning of war actions. One year later the number of patients was still increasing and in 1994 it reached its peak (8.18%). In the next year, 1995, it was lower (2.12%). The high percentage of PV patients in 1994 could be the consequence of multiple stressful events [5] during the war period (1992–1993) which subsequently led to notable skin changes in patients with genetic predisposition for psoriasis. Such observations are in concordance with other authors who point out that stress can be connected with aggravation of psoriasis [2, 11, 17]. In the study mentioned above [19], the frequency of PV patients varies in different years more than 3%, but this is less than our findings (8.3%). We also found that the number of patients during and after the war is considerably different. Reasons for this can be found in organizational immigratory factors. During 1994, a notable immigration in Banja Luka region was recorded and the number of PV patients increased. Hence, economic insecurity, great uncertainty about family and personal life, life without electricity, water, heat, and food caused great psychological stress and the need to request medical help in most of the population. For many people it was easier to handle the disease at the hospital than at home because in hospitals there was a possibility to get necessary medications from the humanitarian aid. Immigration to the region of Banja Luka also contributed to the large number of patients. Until now, such results about the number of psoriatic patients in connection with war surroundings have not been published, so we were not able to compare our results.

Age distribution: The age of the patients in our study was somewhat higher than in the literature: In 5,600 of psoriatic patients in the USA, average age of females was 18 and of males 23 years [13]. In 1,366 psoriatics in Sri Lanka average age of females was 20 and of males 30 years [16]. In England in 1,346 patients, the average age of females was 11–15 years, of males 16–20 years [18], while in Malaysia in 203 psoriatics

the average age for males and females was between 21 and 30 years [1]. The average age of PV patients in Novi Sad [19] was higher than in our research (42.2 years). Our findings concerning age of patients at first appearance of psoriasis were in concordance with other results: it is most frequent between 20 and 50 years [10].

During war there were significantly more patients in the age category 30–50 years than before the war in both groups, AMB and BOL. We can assume that in some age categories war affected the patients: during war, military tributaries were between 30 and 50 years old, while at the same time persons from 18 to 30 years were engaged mostly in regions outside the war zone. However, they were ready to be transferred into the war zone.

Sex distribution: Sex distribution of PV patients in our research was in concordance with other researches, where a predominance of males was recorded [6, 10, 12, 19]. The higher percentage of males in the BOL group was partly a result of regular check-ups for the military service certificate, during which a dermatological examination was compulsory.

Occupation: The majority of patients were workers and agricultural workers. Those groups of population were most numerous in the war zones. Since schools were closed, many pupils moved to other places. This could affect the number of pupils among patients.

First appearance of psoriasis and recurrences: During the war there were more first appearances of psoriasis among AMB patients, probably because of immigration and of arrival of PV patients that were registered in other dermatological institutions. Increase in recurrences among BOL patients can be a result of regular check-ups for military certificates, during which dermatological examination was compulsory, or because patients received medications that were hard to get in other ways during the examination from humanitarian aid free of charge. Exacerbation of the disease could also be a consequence of other factors related to war events.

Heredity: It is estimated that one third of psoriatic patients have positive family history considering psoriasis [11, 14]. However, other authors found lower percentages of familial appearance of psoriasis among their patients [19].

Clinical manifestations: From 1988 to 1995, 9.09% of our patients were treated for generalized psoriasis and 90.91% for psoriasis on other body parts. This as well as distribution of skin changes according to anatomical localization is in concordance with findings of other authors [19], small differences are of methodological nature. Significant differences are mostly a result of smaller number of patients with generalized skin changes. A considerable number of patients with mild psoriasis and less patients with generalized psoriasis during war could be a consequence of inadequate therapy and medical reports for regular evaluation. Also, patients who were judged to have only mild psoriasis had to perform military service. These patients regularly had to take the check-ups, while severely affected patients mostly had certificates that they were

not capable for military service, or they were transferred to bigger centers for treatment, thus their number was smaller.

Conclusion

Economic (inability to obtain necessary medications), social (refugees, deficiency of water and sanitary products, increase

of infectious diseases, poor and irregular nutrition), psychological (death, disappearance, and capture of close family members, exposition to bombardment, fear of war actions spreading), and organizational-migratory factors (obtaining medical records, sending severely affected patients to larger medical centers for treatment), affected appearance and distribution of psoriatic changes before and during the war in patients treated as in patients.

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