

Frequency of Psoriatic Arthritis in General Population and Among the Psoriatics in Department of Dermatology

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During the period 1989-90, the prevalence of psoriatic arthritis was studied in 10,500 randomly selected subjects in Osijek Region, while articular changes were studied in 553 psoriatic patients hospitalized at the Dept of Dermatovenereology, Zagreb University Hospital. For the former, prevalence rates of 0.97% for psoriasis vulgaris and 0.095% for psoriatic arthritis were found. Among those with psoriasis, 9.8% had psoriatic arthritis. Among the hospitalized patients, the corresponding rate was 7.23%.

INTRODUCTION

According to the definition by Moll & Wright (1), psoriatic arthritis (PA) is associated with inflammatory arthritis and psoriasis, giving negative results when testing serologically for rheumatoid factor. The prevalence of PA in the general population has not been studied exhaustively, but according to data already published, PA prevalence ranges between 0.02% and 0.1% (2). Among psoriatics, PA prevalence ranges between 0.5% and 39% (3, 4), though most the consensus of opinion is 7% (2, 5). It is conceivable that the differences in prevalence estimates are a consequence of applying different diagnostic criteria.

The objectives of our study were therefore 1) to establish the prevalence of PA in the general population, 2) to establish the prevalence of PA in a population of psoriatic patients, and 3) to establish the characteristics of PA in our patients.

SUBJECTS AND METHODS

Two groups of subjects were enrolled in the investigation. A random sample numbering 10,500 inhabitants of Osijek Region were studied to determine the prevalence of PA in the general population. The PA prevalence in psoriatics was studied in a sample of 553 patients hospitalized for psoriasis vulgaris (PV). In addition to an examination by a dermatologist, all patients with PV and PA were investigated by questionnaire in a genetic study of psoriasis. The diagnosis of PA was established by a rheumatologist.

In all patients with PA, particular attention was paid to anamnestic data on psoriasis and psoriatic arthritis in the family; time of onset of psoriatic changes affecting skin and joints, and spreading of psoriasis to the nails. In 35 of the altogether 40 patients, HLA was classified according to type. The affected joints in all the PA patients were radiographed and the X-rays were interpreted by a radiologist.

RESULTS

The systematic examination of the 10,500 randomly selected subjects from Osijek Region revealed 10 with a verified diagnosis of PA. Hence the prevalence of PA in the general pop-

ulation of that region is 0.095%, ranging between 0.04% and 0.15%, the probability being 95%.

In the group of patients with PV, 40 (7.23%) were diagnosed as having psoriatic arthritis. In most of the patients (82.5%), psoriatic skin changes preceded changes in the joints. In 17.5% of the PA cases there were anamnestic indications of psoriasis in the patients' families.

16.6% of the PA patients were positive for HLA-B 27, whereas 66.6% and 16.6% respectively were positive for HLA-B 17 and HLA-B 39.

Clinical classification of the PA patients was made according to the criteria of Moll & Wright (Table I). The clinical picture of the skin changes was worse in patients with PA than in psoriatic patients generally. The most frequent deviations from usual laboratory findings were the accelerated ESR (65%) and disproteinemia (47%). 25% of PA patients had an elevated uric acid value, while 35% had elevated IgA. All patients had a negative ANF finding. 85% of PA patients had affected nails, compared with 34% of the psoriasis group generally. There was a preponderance of males (85%) among the patients.

DISCUSSION

The prevalence of psoriatic arthritis (PA) in a random sample of the general population of Osijek Region was found to be 0.095%. Although PA prevalence has been insufficiently studied, rates reported in the meagre literature (2) range between 0.02% and 0.1%. The prevalence of psoriasis generally in the above sample was 0.97%, while the PA rate in this group was 9.8%, which tallies with figures published by other authors (3, 4).

In our group of 553 hospitalized psoriatic patients, 40 were diagnosed as suffering from PA (7.23%). This finding tallies with Leczinski's observation (4) of 6.8%, and with the results published by Sigler et al. (6) who investigated the prevalence of PA in a sample of hospitalized psoriatics, their finding being

Table I. Clinical picture in 40 patients with psoriatic arthritis (PA)

Clinical picture	Number of patients	%
Symmetrical polyarthritis	4	10
Asymmetrical oligo/polyarthritis	25	62.5
"Classic" PA	5	12.5
Psoriatic spondylitis	6	15
Arthritis mutilans	0	0
Total	40	100

some 5–7%. Other PA prevalence data are: 39% according to Leonard et al. (7) and 34.4% according to Oriente et al. (8) and Scarpa R. et al. (9). As only the more serious psoriasis cases are hospitalized, however, such samples are inadequate for epidemiological studies.

There was a male preponderance (85%) among our subjects. Moll & Wright (1) and Leonard et al. (5) report such similar sex ratios as well, while Baker (2) conversely had a preponderance of female PA patients. There was a positive family anamnesis in 17.5% of our cases, whereas Baker reported (2) that only 4.4% of his patients had a positive family history of PA. The lag between onset of psoriasis and onset of arthritis averaged 10.25 years in our material (range 6 months – 40 years), which also tallies with the findings of Leonard et al. (7) and Mollin et al. (10).

Knowledge of the clinical and radiological characteristics of psoriatic arthritis is crucial where psoriasis is either not manifest at all, or the changes are visible only on the nails. As PA inhibits the ability to work and can even lead to complete disability, the diagnosis and treatment of the disease requires constant collaboration between specialists in dermatology and rheumatology.

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