Renal Abnormalities in Patients with Psoriatic Arthritis

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Introduction
Psoriasis is a common chronic inflammatory disease affecting mainly the skin and joints. Its clinical signs and severity vary among individuals and over time. Four distinct pathological alterations characterize this disorder: inflammation, hyperproliferation of the epidermis, altered maturation of the epidermis and vascular alterations (3). Renal abnormalities have previously been reported in patients with psoriasis (1, 2, 4, 5). The aim of this study was to investigate the spread of renal damages in patients with psoriatic arthritis (PsA).

Patients and Methods
One hundred and eighty patients (69 females/111 males) with PsA were consecutively examined by laboratory analyses and clinically for joint manifestations. One hundred and fifty-six patients (86.6%) had peripheral arthritis defined by tender and swollen joints over more than six weeks duration. Axial involvement was diagnosed in twenty-four patients (13.3%) with radiological sacroiliitis and/or ligament ossification, syndesmophytes, vertebral squaring and shining corners of the spine. Twelve patients had both peripheral and axial involvement. Twenty-nine of the 180 patients (13.8%) had hypertension, five diabetes mellitus, one colitis ulcerosa chronic. Thirty-eight patients (21.1%) had renal abnormalities defined as erythrocyte sedimentation rate (ESR) > 24 mm/h, according to the applied definition with decreased creatinine clearance in 18 patients (mean 62.5 ml/min/1.73 m², range 46-75) and/or albuminuria - in 21 patients (mean 0.356 g/24 h, range 0.030-3.4 g/24 h). Those patients with renal damages were compared with those without, significantly older at inclusion into the study (58.3 v 43.5), older at onset of joint disease (36.7 v 31.2), had longer skin disease duration (27.3 v 19.5) and increased serum levels of β2-microglobulin (1.96 v 1.54 mg/L). The serum level of IgA was increased (3.86 v 2.65 g/L), but did not reach significance (p=0.097). There were no significant differences in levels of IgG or IgM in serum. More frequently they had complicating conditions such as hypertension. And joint inflammation with laboratory-measured inflammatory activity defined as erythrocyte sedimentation rate (ESR) > 24 mm/h and/or CRP > 15 mg/l.

According to the results of renal biopsy the patients were distributed as follows: 2 patients - amyloidosis, 2 patients - membranous glomerulonephritis (MGN), 3 patients - immunoglobulin A glomerulonephritis (IgA GN), 5 patients - nephropathia diabetic, 5 patients - tubulointerstitial nephritis (two of these patients had received methotrexate), 4 patients - nephroangiosclerosis.

Conclusions
From this study we can conclude that renal impairment is not a uncommon finding in patients with psoriatic arthritis, however mild. Predictive factors for progression to more severe affection was inflammatory activity, measured by laboratory variables and longer skin disease duration. There were no significant predisposing effects of nonsteroidal anti-inflammatory drug or disease modifying antirheumatic drug therapy.

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References


