

## 49. PROINFLAMMATORY MARKERS IN PSORIATIC ARTHRITIS

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**Introduction.** Rheumatoid arthritis (RA) and psoriatic arthritis (APs) are prevalent forms of inflammatory arthritis that affect up to one percent and 0.3-1 percent of the population, respectively. The etiology remains unknown, but both genetic and medium, are agents of triggering given arthropathies. The onset of APs is clinically recognized when it meets the CASPAR criteria, although it's recognized that it occurs long before clinical symptoms. It's clear that a protein biomarker that could predict joint damage at an early stage would support appropriate, and individualized treatment tactics. Although many biomarkers have been reported in the literature for rheumatoid and psoriatic arthritis, relatively few have reached clinical, and their numbers stay stagnant for a long time.

**Aim of study.** The aim of this study was to identify specific biomarkers that could be used as a screening method for psoriatic arthritis, as well as to assess the action of the sickness and the outcome of treatment in affected patients.

**Methods and materials.** Eleven outpatients, eligible for anti-TNF $\alpha$  treatment, were enrolled in a prospective cohort study for one year.

**Results.** Serum samples for metalloproteinase-3 (MMP3) and high-sensitivity C-reactive protein (hs-CRP) were collected at baseline (t0) and after six (t6), twelve (t12) treatment. The benchmarks were compared with those of an age-appropriate grouping of healthy controls. Sickness action scores and post-treatment functional tests were found to be significantly different baseline. Initially, MMP3 and hs-CRP values in patients with APs were found to be significantly higher than their levels in the control group. MMP3 was significantly lower at t6 ( $P < 0.00011$ ), t12 ( $P < 0.00011$ ). hs-CRP decreased significantly at only twelve months of treatment ( $P < 0.012$ ). A correlation was observed between MMP3 and hs-CRP ( $r = 0.35$ ,  $P = 0.00052$ ).

**Conclusion.** MMP3, hs-CRP show up to be full for early detection of PsA and for monitoring sickness progression.