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Aims To identify the cytokines that are present at higher levels in the serum and synovial fluid (SF) of patients with established rheumatoid arthritis (RA).

Methods Interleukin (IL)1 β , IL2, IL4, IL6, IL8, IL10, IL12 (p70), IL17A, IL18, IL22, IL23, interferon (IFN) γ , leptin, MCP-1, MIP-1 α , OPG, transforming growth factor β (TGF β) and tumour necrosis factor (TNF) were quantified in RA serum and SF samples using FlowCytomix kit. IL21, APRIL and BAFF levels were determined by ELISA. A comparison was performed with osteoarthritis (OA) and spondyloarthritis (SpA) samples.

Results 22 patients with established RA with a mean age of 60.5 $\pm$ 11.1 years, the majority on treatment with low-dose corticosteroids and methotrexate, were evaluated. 23 patients with OA and 16 with SpA were also analysed. RASF had statistically significant higher levels of IL6, IL8, IL10, IL23, OPG, APRIL and BAFF than RA serum and OASF samples. Also, in RASF there was an increase in IL17A, IL21 and MCP-1 compared with OASF. In RASF only IL23 was elevated compared with SpA-SF. All patients had higher circulating TGF β levels than in SF. No significant differences were observed for IL1 β , IL2, IL4, IL12 (p70), IL18, IL22, MIP-1 α , IFN γ , TNF or leptin.

Conclusions In chronic RA there is a higher concentration of proinflammatory cytokines in the joints that contribute to continuous activation and recruitment of innate immune cells towards the synovium. The high levels of IL17A, IL21 and IL23 in RA reinforce the idea that RA is a Th17-driven disease. RAM and RC contributed equally to this work.

A130 CYTOKINE PROFILE IN SERUM AND SYNOVIAL FLUID OF PATIENTS WITH ESTABLISHED RHEUMATOID ARTHRITIS

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