Background CD44 is a widely expressed adhesion molecule responsible for cell-cell, cell-matrix interaction and binds hyaluronan and other extracellular matrix and cell surface proteins. Binding of CD44 leads to immune mediated inflammation, target lysis and tumour dissemination. Except this constant membrane bound form a variety of isoforms are expressed. Soluble CD44 variant isoform 5 (sCD44v5) is associated with a high rate of cell division and is elevated in patients with erosive IgM rheumatoid factor positive Rheumatoid Arthritis (RA+).

Objectives To examine whether sCD44v5 correlates with inflammation and/or joint destruction in a long-term treatment of patients with RA.

Methods Serum levels of sCD44v5 were measured in 73 patients with RA according to the criteria of ACR treated in intervals in our department in the duration of 10 years using a commercially available ELISA-test, developed by Bender-Med-Systems-Vienna. The results of sCD44v5 were compared with Disease Activity Score (DAS), 28 Joint Count (28JC), 30 Swollen Joint Count (30SJC), Ritchie Index, Proximal Interphalangeal Score (PIP), Stoke Index, Larson Score, Steinbrocker Stage, C- Reactive- Protein (CRP), Erythrocyte Sedimentation Rate (ESR), rheumatoid factor (RF) and DMARD therapy.

Results We detected elevated serum levels of sCD44v5 in 50/356 measurements, with a range from 58,4 to 312,9. The mean sCD44v5 was 42,3 ng/ml. The results showed a significant correlation with RF (mean 299,4 U/ml, $p < 0,001$) and a weak correlation with ESR (mean 31,9 mm HG, $p < 0,03$), but no correlation with CRP (mean 21,1 mg/l), DAS (mean 3,54) and other clinical scores. Furthermore we found no significant difference of sCD44v5 with different DMARD therapies.

Conclusion In our cohort sCD44v5 does not prove to be useful as predicting factor or indicator for a long-term treatment observation. Although sCD44v5 is known to be elevated in patients with rheumatoid flare such a correlation could not be shown in our study with weak to moderate inflamed patients. Soluble CD44v5 therefore seems to be elevated only in severe inflammation.

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THU0165 LONGTERM OUTCOME OF AUSTRIAN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background Rheumatoid Arthritis (RA) is a progressive disease and is characterised by increased work disability, functional declines and radiographic damages. To prevent irreversible joint damage, Disease Modifying Antirheumatic Drugs (DMARDs) and recently available biologics should be given as soon as possible. Prospective long-term studies are difficult to organise and may have a minimal relevance for current clinical practice at the end of the study.

Objectives To examine retrospectively the long-term outcome of patients with RA in Austria.

Methods 81 indoor patients with seropositive RA (RA+) and seronegative RA (RA-) completed a standardised clinical and laboratory blood examination 3 ? 8× between 1978 ? 1999. The course of the disease was assessed by determining of Disease Activity Score (DAS), 28 Joint Count (28JC), 30 Swollen Joint Count (30SJC), Proximal Interphalangeal joint score (PIP), Ritchie Index, Stoke Index, Steinbrocker stage and Larson score.

Results Over 21 years with a mean duration of follow up of 10 years we observed a statistically significant improvement of PIP, of Ritchie Index, of Stoke Index and of DAS. Steinbrocker stage and Larson Score increased significantly. With respect to DMARDs we noted that a high percentage of the patients did not receive any DMARDs within the first two years of disease. From all used drugs Methotrexate (MTX) was continued much longer and was the preferred DMARD since the early nineties. Referring to extraarticular manifestations the most frequent was Sicca Syndrome in relation with positive Antinuclear Antibodies (ANA). We found two cases of vasculitis and one case of lung fibrosis; however we did not find a case of amyloidosis.

Conclusion In our long-term follow up a change of treatment with rather weak DMARDs at the onset of the disease to a more aggressive treatment within the last decade was remarkable. With respect to the significant increase of Steinbrocker stage and Larson score as well an early aggressive therapy is however required. With respect to the association of ANA and extrarticular manifestations elevated ANA should give rise for an exact organ screening. The development of predicting factors for the outcome of patients with RA would be helpful to refer patients to specialist care as soon as possible.

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THU0166 HIGH DIAGNOSTIC VALUE OF ANTI-FILAGGRIN AUTOANTIBODIES (AFA) DETECTED BY A NEW ELISA IN A COHORT OF 152 COMMUNITY CASES OF VERY EARLY ARTHRITIS

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Background

Objectives To determine the diagnostic value of autoantibodies (Ab) directed against citrullinated recombinant rat filaggrin (ACRFA) for very early RA.

Methods From a population-based recruitment, 152 patients with early (median disease duration:4 months [2□6 mo]) peripheral arthritis (swelling of at least 2 joints persisting > 4 weeks) were studied. Follow-up period was 1 year. At the end of the study, patients were classified as RA (n = 88) or as other rheumatic diseases. Four Ab: rheumatoid factors (RF-IgM), anti-keratin Ab (AKA), anti-perinuclear factor (APF) and ACRFA by an

ELISA whose result are expressed as the difference of OD values given by sera tested against the citrullinated and non-citrullinated forms of filaggrin were tested at entry.

Results Characteristics of these markers for RA are reported in the Table 1. Specificity of ACRFA was better than that of RF, APF and to a lesser degree AKA. Sensitivity of ACRFA was higher than that of AKA which is the single test still routinely used for detection of AFA. AKA, APF and ACRFA were complementary since certain sera were positive for only one test. Only 5/48 (10.5%) RF-negative RA patients were positive for ACRFA.

Abstract THU0166 Table 1

	Sensitivity	Specificity	Positive predictive value	Negative predictive value
FR-IgM	45.4	92.1	88.8	55.1
AKA	23.8	95.3	87.5	47.6
APF	34.1	92.1	85.7	50.4
ACRFA	30.7	98.4	96.4	50.8

Conclusion AFA detected by a new ELISA have a higher diagnostic value for RA than AFA identified by previous tests in this population-based cohort of very early arthritis.

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THU0167 CORRELATIONS BETWEEN THE PRESENCE OF RF, CRP AND AAF AND THE DIAGNOSIS AND PROGRESSION OF RA

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Background

Objectives The aim of the study is to demonstrate the important role played by rheumatoid factor (RF), C reactive protein (CRP) and anti-philaggrin antibodies (APA) in the early diagnosis and in the follow-up of rheumatoid arthritis (RA).

Methods Twelve patients were included in our study, all in an early stage of the disease, accomplishing the ARA criteria for the classification of RA. We tested the levels of RF, CRP and APA and we evaluated on the X-ray the erosions according to the Larsen score.

Results The RF was present in 80% of the cases while CRP was present in 100% and APA only in 38%. However the APA have a specificity of 100% for RA and a strong correlation with the presence of HLA DR1. The high levels of RF and CRP are best associated with the presence and progression of the erosive lesions, the presence of the rheumatoid nodules and of the systemic involvement. CRP can be considered as a very good prognosis factor in the follow-up of RA.

Conclusion RF and CRP are highly important factors in assessing of the evolutivity of the radiological lesions and in the follow-up of RA, while APA have a high specificity for RA and their presence is less correlated with the severity of the disease and more with an early diagnosis, before the ARA criteria of classification would be fulfilled.

THU0168 CORRELATION BETWEEN SF36 AND INDICES OF OUTCOME IN 121 RHEUMATOID ARTHRITIS (RA) PATIENTS

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Background The SF36 is a generic 36 items questionnaire which measures eight dimensions of health status, and permit to make direct comparisons with other disease states or with population norms. SF36 reflects a combination of physical and mental function, and well-being, the extent of social and role disability, and patients personal evaluation of health status. It has been used in several countries and its contents and construct validity, test retest reliability and responsiveness have also been reported.

Objectives to evaluate the health related quality of life (HRQoL) of patients affected by rheumatoid arthritis (RA) through SF36, and to correlate the results with ACR core set activity index and with mHAQ disability index.

Methods The study included 121 consecutive patients affected by RA attending the "Hospital de Clinicas", mean age 50(18-84) years, mean disease duration 91(3-480) months, erythrocyte sedimentation rate (ESR)34.71(8-105) mm/h, and mean mHAQ 0.68(0-3). The HRQoL was evaluated through SF36(100-0) eight domains, physical function (PF), physical role (PR), bodily pain (BP), general health (GH), vitality (V), social function (SF), emotional role (ER), and mental health (MH). Disease activity was assessed using ACR core set, swollen joint count (SJCcount 0-28), tender joint count (TJ count 0-28), pain by visual analogue scale (VAS 0-100), patient global assessment by VAS, physician global assessment by VAS, acute phase reactant erythrocyte sedimentation rate (Westergren, mm/h), and disability by mHAQ(0-3).

Results The mHAQ showed good correlation with PF, BP($r > 0.61$), SF($r > 0.55$), and correlated with PR, V($r > 0.47$). VAS pain correlated well with BP and V($r > 0.60$), and correlated with PF, PR, and GH($r > 0.41$), patients global assessment correlated with BP, GH, V($r > 0.48$). All correlations had $p < 0.001$.

Conclusion SF36 showed to be a practical tool for use in RA patients and may facilitate to achieve burden of impact of disease and to compare with that of other chronic diseases. In this cohort mHAQ was significantly associated with physical and social function as well as bodily pain and vitality. VAS patients global assessment was associated with general health, vitality and bodily pain. No correlation were found with physical and mental role suggesting that different information is involved. Differences with others RA cohorts may be due to demographic characteristics and medical conditions in our group.

THU0169 EARLY RHEUMATOID ARTHRITIS(ERA) IN THE ASPECT OF DIFFERENTIAL DIAGNOSIS

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Background Difficulty in the diagnosis of early rheumatoid arthritis (ERA) in the aspect of differential diagnosis.

Objectives The diagnosis of rheumatoid arthritis (RA) is based on ACR criteria, which are clinical, radiological and immunological. During the first month after onset the diagnosis is often difficult because of a frequently atypical presentation and a lack