of radiological changes. Rheumatoid factor has low specificity and is often negative in ERA. The other non-rheumatological disorders (viral infection, neoplastic and endocrine diseases) may also in the early stage present like RA symptoms.

The objective of this study was to revise the preliminary diagnosis of ERA in hospitalised patient.

Methods Clinical examination (including laboratory tests and X ray), immunological tests: RF, antikeratin antibodies (AKA).

Results During the last 26 month 510 RA patients (according ACR criteria) were hospitalised in Rheumatology Department. Among this group of patients 94 (18%) were admitted with the preliminary diagnosis ERA. All of this patients group fulfilled the first four clinical ACR criteria. The duration of the disease was varied 3 to 9 months. All patients were carefully examined according number of painful and swollen joints, their symmetry and localisation, presence of RF, AKA antibodies and radiological erosions. In cases where RA diagnosis was doubtful other needful examination were done. The diagnosis of ERA was established in 48 (52%), but in 46 (48%) was excluded. ERA patients were predominately women, symmetrical polyarthritis of the hands was present in 45 (52%). RF in 28 (58%), radiological erosions were found in 5 (10%). In group of patients with excluded ERA the following diagnosis was established: osteoarthritis 14 (31%), RA ? like (nonclassified) 13 (28%), reactive arthritis 3(7%), hepatitis viral infection 2 (4%), neo 2 (4%), Hashimoto syndrome 5 (11%), Sjogren syndrome 2 (4%), Polymyalgia 2 (4%), Fibromyalgia 3 (7%). AKA were present in 30 (62%) patients in group with established diagnosis of RA and RF was present in 28 (58%) patients in this group. AKA was present in 10 (21%) patients with different diagnosis and RF was observed in 8 (17%) patients in this group.

Conclusion 1) ACR criteria are insufficient in aspect of differential diagnosis of ERA and non ERA. 2) Present RF and AKA are more specific in ERA than in non ERA patients. 3) The diagnosis of ERA should be established by specialists.

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THU0170 IMMUNOGLOBULIN G FC-RECEPTOR (FCGR) IIIA POLYMORPHISMS AND DISEASE EXPRESSION IN RHEUMATOID ARTHRITIS

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Background Fc receptors for IgG (FcγR) modulate immune responses. Fcγ receptors are expressed on various leukocytes and contain allelic polymorphisms with different capacity for IgG binding and phagocytosis. The FcγR polymorphisms have been implicated as genetic factors that may influence the susceptibility to autoimmune disease. FcγRIII has two isoforms (A and B) and is encoded by genes on chromosome 1. For FcγRIIIA, the presence of the valine (V) allele confers a higher receptor affinity for IgG1, IgG3 and IgG4 than does the presence of the phenylalanine (F) allele.

Objectives We investigated the distribution of the FcγRIIIA alleles in rheumatoid arthritis (RA), and whether they were related to disease expression and severity.

Methods Ninety-six controls and 114 patients fulfilling ACR criteria for RA were genotyped for FcγRIIIA polymorphisms using PCR. Physician's global assessment of RA type estimated RA disease expression. In addition, usual measures of disease activity were recorded.

Results Crosstabulation of the FcγRIIIA genotypes V/V and V/F combined vs the F/F genotype showed that more patients with aggressive RA than expected had the V/V and V/F genotypes ($P < 0.05$). The FcγRIIIA V/F genotype and the V allele was slightly more frequent among RA patients than among controls. This finding however, was not statistically significant. We found no significant associations with the clinical and laboratory variables of disease activity.

Conclusion The results of previous studies regarding FcγRIIIA in RA are not consistent. The present findings of a more severe disease among patients homo- and heterozygous for the valine (V) allele, and the suggested tendency of more than expected V/V and V/F genotypes among RA patients as compared to controls, lend support to the notion of FcγRIIIA as a possible disease susceptibility and disease-modifying gene in RA.

THU0171 A CLINICAL RELEVANT INCREASE IN RADIOLOGICAL PROGRESSION, THE PATIENT'S PERSPECTIVE

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Background Radiological progression is considered the most important outcome for Rheumatoid Arthritis, but there is no established definition, as to what constitutes a clinical important progression of joint damage. The smallest detectable difference (SDD) for the modified Sharp method and the Larson method was taken as a starting point. And expert opinion of rheumatologists was used to determine the clinical relevant progression. However these findings might not reflect the true clinical important progression in radiological damage. The clinical important difference should be the effect this progression has on the patient, being the development of physical disability.

Objectives To estimate the clinical relevant increase in radiological damage, using the effect on physical disability.

Methods This study elaborates on the findings of studies, investigating the clinical relevant increase in the HAQ-DI score, and on a study investigating the relation between disease activity, radiological damage, sociodemographic factors, and physical disability. The clinical relevant difference in physical disability (HAQ-DI) has been determined by asking patients to rate themselves relative to another patient, and was estimated to be between 0,2 and 0,3. The relation between physical disability (HAQ-DI), disease activity (DAS), and radiological damage (Modified Sharp score) was determined, using the follow-up data of 378 patients from an open prospective study of early RA (disease duration < 1 year). Linear regression was used at 0, 3, 6, and 9 years after inclusion with as dependant variable the HAQ-DI, and as independent variables, disease activity (DAS), radiological damage, and sociodemographic factors. The main results of this study were that the relation between radiological progression and physical disability was dependent on the activity of the disease and the present radiological damage (5). With higher disease

activity, or more damage present the effect of radiological damage on physical function decreased. Using the derived linear regression models and the measure of a clinical relevant difference in HAQ-DI a clinical relevant increase in radiological damage for the modified Sharp score was calculated.

Results The clinical relevant increase in radiological damage was estimated to be about 10 or 20, for a DAS of 1 or 2 respectively. It was dependant on the activity of the disease and amount of existing joint damage.

Conclusion Estimating a clinical relevant increase in radiological progression, using the patient's perspective is possible. A conservative threshold of 10–20 for a clinical relevant increase (Modified Sharp score) can be used as a guideline. These results need replication in other patient cohorts.

THU0172 THE CORRELATION ANALYSIS OF FUNCTIONAL DISABILITY INDEXES WITH DISEASE ACTIVITY DETERMINANTS IN WOMEN WITH ACUTE RHEUMATOID ARTHRITIS

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Background Rheumatoid arthritis (RA) is a chronic inflammatory disease causing joint deformities and consequent functional disability.

Objectives The aim of this cross-sectional study was to assess the possible correlations between some determinants of (CRP disease activity such as Ritchie articular index (RAI), erythrocyte sedimentation rate (ESR), C-reactive protein) and the functional disability questionnaires in women with acute RA, aged between 50 and 65.

Methods The functional status of 52 women with acute RA, diagnosed according to modified ARA criteria were assessed by Health Assessment Questionnaire (HAQ) and Lee Functional Index (LFI). Ritchie Articular Index values were determined with joint examination, ESR and CRP with laboratory techniques in blood samples. The relations between these disease activity determinants and functional scores were assessed by correlation analysis.

Results A strong positive correlation was found between two functional indexes ($r = 0.87$, $p < 0.0001$). The significant correlations found between ESR, CRP and LFI ($r = 0.31$, $p < 0.01$; $r = 0.40$, $p < 0.001$, respectively), were stronger than the positive correlations determined between the same variables and HAQ ($r = 0.26$, $p < 0.05$; $r = 0.29$, $p < 0.05$, respectively). RAI exhibited stronger correlations with HAQ and LFI when compared with those of laboratory variables with HAQ ($r = 0.47$, $p < 0.01$; $r = 0.56$, $p < 0.001$, respectively).

Conclusion The most related disease activity determinants with examined functional disability levels in women with acute RA were observed to be RAI, CRP and ESR, consecutively. The prediction values of joint symptoms seemed to be more prominent when compared with laboratory variables.

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THU0173 GENETIC ANTICIPATION IN FAMILIAL RHEUMATOID ARTHRITIS

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Background Rheumatoid arthritis (RA) is a systemic inflammatory disease of connective tissue which is characterised by chronic progressing articular lesion and disturbances in immune system. Aetiology of the disease is still unknown. Nevertheless, the role of genetic factors in its determination is confirmed by multiple family and twins studies.

Objectives To determine if there is evidence for genetic anticipation in RA in multigenerational RA pedigrees.

Methods Age at onset and disease severity was compared within 26 parent/offspring pairs with RA.

Results The age at onset of RA was earlier in the offspring than in parents (26.3 ± 12.5 and 45.65 ± 14.0 correspondingly), and this difference is statistically reliable ($\delta < 0.01$). In couples aunts-cousins ($N = 6$) in multigenerational advanced age aunts fall ill (44.4 ± 15.9 and 25.0 ± 9.4 correspondingly) and the disease onset relating to age is also statistically reliable ($\delta < 0.02$). In these multigenerational RA pedigrees, the offspring had a tendency to more severe disease, despite shorter disease duration and younger age.

Conclusion These results suggest genetic anticipation occurs in RA, where the beginning of disease manifestation becomes earlier in the following generation.

THU0174 REACTIVE AMYLOIDOSIS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background It has been known that reactive (secondary, AA) amyloidosis (RAA) is a major complication of rheumatoid arthritis and amyloidosis is still a main cause of death in rheumatoid arthritis (RA) patients. Diagnosis of amyloidosis is based on Congo red staining of amyloid deposits in tissue biopsies. The safe and simple examination is abdominal fat aspiration biopsy (AFAB).

Objectives The aim of the study was to investigate the positive rate of amyloid deposits in AFAB samples and to clarify whether the presence of amyloid deposits is correlated with the clinical features of patients.

Methods AFAB was performed in patients with established diagnosis of RA referred to our department during the period from 1996 to 2001.

Results Among 103 patients (15 males, 88 females) marked amyloidosis deposits were found in 34 (33%) cases. The incidence of amyloidosis was more frequent in male than female patients (53% male vs 29% female). Raised levels of creatinine (> 1.3 mg %) were found in 27% patients with amyloidosis and 3% without amyloidosis; proteinuria respectively in 35% with positive AFAB and 13% with negative AFAB results. There was no