Speaker abstracts 2001

Validity of diagnostic tools – Wednesday
13 June, 14.00-16.00/Congress Hall**SP0001 SENSE AND NONSENSE IN THE DIAGNOSTIC
PROCEDURES OF EARLY RHEUMATOID ARTHRITIS**

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Early arthritis clinics will consist of a very heterogeneous group of arthritis patients, both as to their initial clinical presentation as to their outcome. Dependent on the way patients have been selected, about one third of the patients has a disease that may ultimately classified as rheumatoid arthritis (RA), one third will have another classifiable inflammatory rheumatic disorder and one third of the patients remains unclassified.

The diagnosis or classification of RA is based on the presence of a distinct clinical entity that needs a certain amount of time to develop. The classification criteria for RA are therefore not very suitable for early diagnosis. In addition, there is a certain circularity in using the ACR criteria as gold standard to diagnose RA early in the disease course. The essence of RA diagnosis or RA classification is the presence of a persistent and destructive polyarthritis. In early arthritis we are not dealing with an already existing disease entity that can be classified as RA, but we are confronted with a very heterogeneous patient population. At that stage we would like to predict which patients will have a self-limiting arthritis, a persistent non-erosive arthritis or a persistent erosive arthritis. At present Ig-M rheumatoid factor (RF) appears to be the most powerful single predictor of persistent erosive arthritis. Apart from genetic markers, many clinical and laboratory parameters at the beginning of the disease have been found more or less predictive of severe erosive arthritis, including active polyarthritis, high scores of disease activity measurements, involvement of at least two large joints, different serological markers such as the anti-perinuclear factor (APF) and anti-citrulline antibodies (Anti-CCP, "AKA"), initial HAQ score and initial radiological score. None of these variables is powerful enough though, to predict the presence of persistent erosive arthritis as a single predictor. Analysis of the Leiden Early Arthritis Cohort data showed that, looking at all potentially predictive determinants obtained from patient history, physical examination, serological and genetic markers, an optimal criteria set of 7 variables consisting of symptom duration, morning stiffness >1 h, arthritis of 3 or more joints, bilateral compression pain of metatarsophalangeal joints, RF positivity, anti-cyclic citrullinated peptide antibody positivity and the presence of erosions could successfully discriminate between self-limiting, persistent non-erosive and erosive arthritis. The predictive model could be simplified to provide predictive probabilities at the individual patient level. The overall diagnostic/prognostic performance of the 1987 ACR classification criteria was significantly lower than the criteria set described above. The utility of (a combination of) diagnostic/predictive parameters has to be judged against the background of the patient population in which the criteria have been developed.

**SP0004 HOW TO MEASURE AND PREDICT THE IMPACT OF
RHEUMATOID ARTHRITIS**

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Rheumatoid arthritis (RA) is a chronic disease with severity and consequences varying from one patient to another, and potential impact on individual, family and society over the long term.

The impact can be defined as the various outcomes beyond the patho-physiological disease process. The components of the impact of RA comprise of joint damage, functional disability, impairment of quality of life in several dimensions and socio-economic consequences, like work disability, social participation restriction, and economic costs. These consequences should be analysed in the frame of the recent revision of the international classification of impairment, disability and handicap (ICIDH-2). This model will help understand the mechanisms of resistance to and limitation of the impact of the disease.

The measurement of such outcomes has largely benefited of research focused on this particular disease in the past two decades. A reliable measure is necessary to assess the impact, and to document the progression of impact over time. Outcome measures should be sensitive to natural changes or therapy effects over the disease progression.

- Radiographic lesions are now well documented by increasingly accurate and standardised assessment scoring methods of joint damage.

- Self-assessment questionnaire of functional disability has now its standard, the HAQ, with some variants, primarily developed and documented in RA.

- Health-related quality of life measures have been an exploding area of methodology and research development in the recent years, making generic and RA specific instruments like the AIMS2, or the AIMS2 Short Form valid and easily accessible in clinical practice.

- Socio-economic consequences are less documented. Several studies have examined and quantified the amount of work disability the frequency of which varies by country. Recent analysis of the EURIDISS cohort study has examined the social network changes and the influence of social support provided to patients. The direct and indirect costs of RA have been well documented in some country and appear substantial.

The prediction of outcome by a simple equation modelling outcome as a function of measurable predictors would be ideal for monitoring patient therapy from the very start of the disease. Unfortunately, despite extensive studies looking at large numbers of patients, a part of individual variation and the irregular progression over time still challenges the search for an accurate group of predictors. It is readily possible to obtain a reasonable probability estimate of outcomes from a consensual set of determinants that will be reviewed. But it is not yet possible to monitor individual patient with sufficient accuracy, with the exception of a few outcomes using mathematical models demanding intensive data collection.

In an epidemiological perspective, longitudinal observational studies are the standard to determine such predictors. They can be conducted retrospectively, with the risk of selection and measurement bias, or prospectively, at the cost of study duration and loss to follow-up. The identified determinants of radiographic damage and of functional disability will be reviewed, while the prognostic factors of quality of life have been less frequently