early phase of the disease because disability is caused by the inflammation of the joints during this period while the consequence of inflammation—destruction—takes time to appear. Later, after 5–6 yr, the relation between damage and disability has become significant. This statement shows the importance of X-ray progression as an outcome parameter of treatment with disease-modifying anti-rheumatic drugs (DMARDs): if progression can be prevented in the early phase, later disability may be avoided.

However, the average progression rates given in the review can be misleading. Apart from the considerable variation in the pattern of progression between individual patients mentioned in the review, the outcome after a longer period may also show huge differences. In an ongoing prospective, longitudinal, one-centre cohort study, 128 patients with active early erosive RA [2, 3] were originally included. They had participated in a clinical trial and were treated with conventional DMARDs (parenteral gold or methotrexate). One hundred and fifteen of these patients were followed over 7 yr; eight had died and five were lost to follow-up. At baseline, the mean radiographic score was 1.6% of the possible maximum score (range 0–10%), after 7 yr it was 13% (range 1–50%), representing an average increase of 1.6%/yr. This is in line with the published data cited in the review, although it has to be taken into account that the patients in this trial were erosive at baseline and therefore had a poor prognosis. The course of the disease was very different between individual patients: only 15/109 patients (14%) reached a score of $>20\%$ of the maximum possible score (mean 31%), which translates into an increase of 4.2%/yr. Forty-five of 109 patients (42%) ended with a score between 5 and 20% of the maximum score (mean 9.5%). Their progression per year was 1.1%. Forty-nine of 109 patients (44%) reached a score below 5% of the maximum score after 7 yr (mean 2.1%); their mean progression rate per year was 0.07%, i.e. they had nearly no progression.

Therefore, it is important to know that only a minority of patients treated with conventional DMARDs have a really severe progressive disease, while a large proportion of patients may show a very benign disease course. This fact is obscured by reporting mean progression rates.

R. Rau, G. Herborn, H. Fenner[1]

Department of Rheumatology, Evangelisches Fachkrankenhaus Ratingen, GmbH Rosenstrasse 2, Ratingen 40882, Germany and [1]*Eidgenössische Technische Hochschule, Zurich, Switzerland*

Accepted 15 June 2000

Correspondence to: R. Rau

Rheumatology 2000;39:1434–1435

Links between joint damage and disability

Sir, The review by Scott *et al.* [1] is very important and useful as it clearly shows, as could be expected, that radiographically detectable joint damage is related to disability. This relation is somewhat obscured in the

1. Scott DL, Pugner K, Kaarela K, Doyle DV, Woolf A, Holmes J *et al.* The links between joint damage and disability in rheumatoid arthritis. Rheumatology 2000;39:122–32.
2. Rau R, Herborn G, Menninger H, Blechschmidt J. Comparison of intramuscular methotrexate and gold sodium thiomalate in the treatment of early erosive rheumatoid arthritis. Br J Rheumatol 1997;36:345–52.

3. Rau R, Herborn G, Zueger S, Fenner H. The effect of HLA-DRB1 genes, rheumatoid factor and treatment on radiographic disease progression in rheumatoid arthritis patients over 6 years. J Rheumatol 2000; in press.