

radiography; MRI can detect early joint damage and predict radiographically visible progression of RA. Whole-body MRI is expensive and intimidating for the patient, but extremity MRI (E-MRI) is low cost and relatively comfortable, as the technique images only peripheral joints, using a small MRI device.

Lindegaard *et al.* enrolled 25 consecutive patients with early RA from a single Danish center. Previously untreated patients with RA symptoms of <1 year were assessed for synovitis, bone erosions and edema at baseline by E-MRI of the dominant hand and X-ray imaging of both hands. All patients were started on 7.5 mg per week methotrexate, increased incrementally to 20 mg per week over 5 weeks. Patients with high baseline disease activity also received 7.5 mg prednisolone daily, tapered as required. E-MRI and X-ray imaging were repeated at 6 months and 12 months.

E-MRI detected more erosions than radiography at all time points. Baseline bone erosions detected by E-MRI were strongly associated with an increased risk of radiographically visible erosion after 1 year.

Lindegaard and colleagues suggest that E-MRI is a feasible alternative to whole-body MRI that can identify patients whose RA is likely to progress in the first year of treatment and who might benefit from the early introduction of aggressive therapies.

**Original article** Lindegaard HM *et al.* (2006) Low-cost, low-field dedicated extremity magnetic resonance imaging in early rheumatoid arthritis: a 1-year follow-up study. *Ann Rheum Dis* **65**: 1208–1212

## Ethnicity and socioeconomic factors predict SLE activity level

In 1998, cross-sectional results from LUMINA XXXV (Lupus in Minorities: Nature vs Nurture) showed that ethnicity and genetic factors, as well as socioeconomic, psychological and behavioral variables, were associated with high disease activity in patients with recent-onset systemic lupus erythematosus (SLE). Alarcón and colleagues' follow-up longitudinal study of LUMINA participants investigated these factors in more detail, to establish which factors influence ongoing high disease activity.

The authors evaluated data from 554 LUMINA participants with defined ethnicity (i.e. all four grandparents had identical ethnicity).

There were 100 Hispanic patients from Texas, 94 Puerto Rican Hispanic patients, 199 African Americans and 161 Caucasians. At enrollment, patients were aged ≥16 years and had SLE for ≤5 years. High SLE activity (according to American College of Rheumatology criteria) was present in 72% of African Americans, 71.3% of Hispanic patients from Texas, 43.9% of Caucasians, and 31.9% of Puerto Rican Hispanic patients.

Alarcón *et al.* found that African American and Hispanic (from Texas) ethnicity predicted continued high SLE activity. High SLE activity was also associated with socioeconomic, psychological, and behavioral factors, including lack of health insurance, poor social support, and abnormal, illness-related behaviors. Genetic factors were not associated with continued high SLE activity, despite the association between genetic factors and high SLE activity seen at disease onset in the original LUMINA study. The authors recommend that intervention in the modifiable factors identified might improve outcomes for patients with SLE.

**Original article** Alarcón GS *et al.* (2006) Systemic lupus erythematosus in a multiethnic cohort: LUMINA XXXV. Predictive factors of high disease activity over time. *Ann Rheum Dis* **65**: 1168–1174

## Modifiable cardiovascular risk factors should be targeted in patients with RA

Patients with rheumatoid arthritis (RA) have an elevated risk of cardiovascular disease, in part because of an increased prevalence of diabetes and features of RA and its treatment. Dessein and Joffe, therefore, investigated the relative contributions of traditional (age, abdominal obesity, hypertension and antihypertensive therapy) and RA-specific (disease activity and glucocorticoid therapy) risk factors for impaired insulin sensitivity and beta-cell function, in 94 white patients with RA.

Cross-sectional analysis revealed that patients with high-grade inflammation had more insulin resistance, poorer beta-cell functioning, and increased dyslipidemia, as well as higher BMI and waist circumference, than those with low-grade inflammation. Logistic regression analysis indicated that abdominal obesity accounted for most of the observed difference in insulin resistance. Disease activity