"EliA dsDNA is at least as useful as CLIFT as [a] monitoring tool in the follow-up of SLE patients, but with the advantages of being automated, fast and quantitative," the investigators claim.

Results showed that serum positivity for anti-dsDNA antibodies was significantly more frequent in active nephritis than inactive nephritis for both of the assays, and that both assays had a high negative predictive value for lupus nephritis. The study also showed that there was a significantly higher frequency of positive sera for anti-dsDNA antibodies during lupus flares measured by EliA dsDNA compared with CLIFT. Although EliA dsDNA was better at detecting lupus flares than CLIFT, its performance was still limited: anti-dsDNA responses during lupus activity were variable, which is probably due to the complexity of the disease. The investigators conclude, however, that the use of anti-dsDNA antibody testing is warranted for individualized monitoring of disease activity.

Rachel Murphy

Original article López-Hoyos M *et al.* (2005) Clinical disease activity and titers of anti-dsDNA antibodies measured by an automated immunofluorescence assay in patients with systemic lupus erythematosus. *Lupus* **14:** 505–509

Cartilage volume is better than joint-space width for predicting joint replacement in osteoarthritis

Investigators in Australia have suggested that cartilage volume, as measured by MRI, might be a better predictor of joint replacement in patients with osteoarthritis than radiographic joint-space width (JSW). The current 'gold standard' for assessing anatomic progression of osteoarthritis is JSW, but increasing interest in directly measuring cartilage volume prompted the comparison of these two methods.

In the longitudinal trial, 28 osteoarthritis patients had MRI and a weight-bearing radiograph at baseline and again after approximately 2 years. A potential limitation of the trial was the use of standing rather than semiflexed radiographs, although the method was optimized by including only patients who had satisfactory alignment in their radiographs at baseline and follow-up.

The data from the study showed that there was a modest but statistically significant correlation between radiographic minimum JSW and tibial and femoral cartilage volume at baseline, but there was no correlation between minimum JSW and cartilage volume in any of the cartilage plates over time. The authors comment that this lack of longitudinal correlation highlights the problem of using the one-dimensional measure, JSW, to indirectly measure three-dimensional structures. The data from the trial also revealed a trend for change in medial tibial cartilage volume, but not JSW, to be associated with joint replacement over 4 years. Further work using semiflexed radiographs in a larger sample size is required to verify the findings of this study.

Rachel Murphy

Original article Cicuttini F *et al.* (2005) Comparison of conventional standing knee radiographs and magnetic resonance imaging in assessing progression of tibiofemoral joint osteoarthritis. *Osteoarthritis Cartilage* **13:** 722–727

Validation of the preliminary criteria for catastrophic APS

Antiphospholipid syndrome (APS) is characterized by production of autoantibodies to phospholipids; catastrophic APS (CAPS) is an uncommon but life-threatening variant, in which this leads to occlusion of small blood vessels and multiorgan failure. Since 2000, interested clinicians have recorded cases on an international internet-based register, classifying APS as catastrophic according to their clinical judgment. Although not designed for diagnosis, preliminary criteria for the classification of CAPS were drafted in 2003; in this study, Cervera *et al.* aimed to describe the characteristics of registered cases, and to use this information to validate these criteria.

By October 2003, 220 patients were registered (more females than males; mean age 38 years). Renal, pulmonary, cerebral, cardiac and cutaneous manifestations of CAPS were most common.

The criteria were applied to 176 registered cases for whom sufficient information was available, and to 175 control patients: 100 with systemic lupus erythematosus (all with antiphospholipid antibodies and 65 with associated APS), and 75 with primary APS. In 89 cases all four criteria for definite CAPS were met; in 70 cases the criteria for probable CAPS were met. None of the control patients met the criteria for definite CAPS and only one for probable CAPS. The positive predictive value