

before diagnosis in 57 patients. Rheumatoid factor was found in 44 patients; of 33 patients who developed arthritis, rheumatoid factor was present before disease onset in 28 patients, appearing a mean of 2 years before diagnosis. Anti-dsDNA was found in 80 patients; 35 of the 38 patients who developed ACR-defined renal disease had anti-dsDNA antibodies before or concurrently with diagnosis.

The authors conclude that ACR-defined clinical symptoms commonly appear before the diagnosis of SLE, and that the development of these symptoms is usually preceded by the appearance of associated antibodies. Early detection of autoantibodies could, therefore, be important for the management of SLE.

Original article Heinlen LD *et al.* (2007) Clinical criteria for systemic lupus erythematosus precede diagnosis, and associated autoantibodies are present before clinical symptoms. *Arthritis Rheum* **56**: 2344–2351

CT is superior to radiography for the diagnosis of sacroiliitis

Radiographic diagnosis of sacroiliitis is difficult, with large interobserver variation being reported. A number of small studies have suggested that CT might be superior to radiography for the diagnosis of sacroiliitis. Geijer *et al.*, therefore, compared the diagnostic accuracy of radiography and CT in a retrospective review of 910 patients who underwent both procedures.

Radiography returned a diagnosis of sacroiliitis in 100 patients (11.0%), compared with 230 patients (25.3%) diagnosed as positive by CT. An equivocal result was obtained in 250 radiographs (27.5%), compared with 87 CT examinations (9.6%). Agreement between the two techniques was only fair, with a kappa value of 0.2418. When CT was used as the reference technique, radiography had a false-positive rate of 35% and a false-negative rate of 22.5%. In all, 41.3% of radiographs produced an incorrect diagnosis.

The authors conclude that radiography has limited utility for the diagnosis of sacroiliitis, and recommend sectional imaging as the method of choice.

Original article Geijer M *et al.* (2007) The clinical utility of computed tomography compared to conventional radiography in diagnosing sacroiliitis. A retrospective study on 910 patients and literature review. *J Rheumatol* **34**: 1561–1565

LIGHT is involved in the pathogenesis of RA, but not OA

Activated T-cells are involved in the pathogenesis of rheumatoid arthritis (RA). LIGHT (also known as tumor necrosis factor ligand superfamily member 14) is produced by various immune cells, including activated T-cells. Pierer *et al.*, therefore, analyzed the expression and function of LIGHT and its receptors in synovial samples from patients with RA.

Synovial fluid was obtained from patients with RA ($n=6$, with cells; $n=42$, without cells) and osteoarthritis (OA; $n=25$, without cells). Synovial tissue obtained from individual patients undergoing knee replacement surgery was used for isolation of cultured synovial fibroblasts (SFs).

LIGHT was expressed by CD4⁺ T cells, but not CD68⁺ macrophages, in synovial samples obtained from patients with RA. LIGHT was not detected in synovial samples from patients with OA; however, activated T cells were virtually absent in these samples. SFs cultured from patients with RA or OA expressed receptors for LIGHT. The authors, therefore, suggest that it might be the availability of LIGHT, rather than increased expression of its receptors, that is required for development of RA. LIGHT stimulation of SFs enhanced the expression and/or activity of various molecules involved in immune cell activation, and significantly decreased FasL (Fas ligand; also known as tumor necrosis factor ligand superfamily member 6)-induced cell death of SFs, but not their rates of spontaneous apoptosis or proliferation.

Pierer *et al.* conclude that LIGHT is upregulated in the joints of patients with RA, but not OA, and suggest that it might lead to T-cell co-stimulation, enhanced infiltration of lymphocytes and synovial hyperplasia.

Original article Pierer M *et al.* (2007) The TNF superfamily member LIGHT contributes to survival and activation of synovial fibroblasts in rheumatoid arthritis. *Rheumatology (Oxford)* **46**: 1063–1070

Consumption of fruit might be beneficial for bone health and decrease the risk of OA

Reactive oxygen species, produced by joint cells, cause damage to various macromolecules and have a role in the pathogenesis