

IN BRIEF

IMAGING

Systematic ultrasound examination could be more sensitive than clinical examination for detecting residual disease activity in early rheumatoid arthritis (RA), even in patients who are in remission. Ultrasound detected residual synovitis in 95% of 106 patients who were in clinical remission, and multivariable logistic regression analysis revealed that a positive power-Doppler signal could predict synovitis relapse within 6 months.

Original article Scirè, C. A. *et al.* Ultrasonographic evaluation of joint involvement in early rheumatoid arthritis in clinical remission: power Doppler signal predicts short-term relapse. *Rheumatology (Oxford)* doi:10.1093/rheumatology/kep171

INFLAMMATION

Investigators have shown that methylprednisolone is superior to infliximab for the treatment of a chronically inflamed knee. After administering 41 intra-articular injections of methylprednisolone or infliximab to 28 knees in 23 patients, van der Bijl *et al.* found that knee joint score improvements were insufficient in all patients given infliximab. By contrast, 8 out of 21 methylprednisolone injections were effective.

Original article van der Bijl, A. E. *et al.* Efficacy of intraarticular infliximab in patients with chronic or recurrent gonarthrosis: a clinical randomized trial. *Arthritis Rheum.* 61, 974–978 (2009).

OSTEOARTHRITIS

A study published in *Osteoarthritis Cartilage* demonstrates that local intra-articular injection of magnesium sulfate significantly reduces cartilage degeneration and suppresses synovitis compared with saline treatment in a rat model of osteoarthritis. Furthermore, improvements in mechanical allodynia and thermal hyperalgesia were observed in the knees of rats treated with magnesium sulfate compared with controls.

Original article Lee, C. H. *et al.* Intra-articular magnesium sulfate (MgSO₄) reduces experimental osteoarthritis and nociception: association with attenuation of N-methyl-D-aspartate (NMDA) receptor subunit 1 phosphorylation in rat chondrocytes. *Osteoarthritis Cartilage* doi:10.1016/j.joca.2009.05.006

VASCULITIS SYNDROMES

According to research by Palomino-Morales and colleagues in Spain, a polymorphism in the gene encoding Toll-like receptor 4 might be linked with a susceptibility to develop giant-cell arteritis (GCA). The researchers identified a significant increase in the TLR4+896 G allele in 210 patients with biopsy-proven GCA compared with 678 matched controls, which they attributed to an increased heterozygosity for the TLR4-896 A/G phenotype in patients.

Original article Palomino-Morales, R. *et al.* Association between Toll-like receptor 4 gene polymorphism and biopsy-proven giant-cell arteritis. *J. Rheumatol.* 36, 1501–1506 (2009).