Intensified COBRA therapy induces remission in 90% of patients with early RA

Aggressive, high-dose combination therapy in early rheumatoid arthritis (COBRA) is superior to monotherapy for suppressing radiologically visible progression and inducing rapid remission in patients with rheumatoid arthritis (RA). In a study by van Tuyl and colleagues, treatment with a tightly controlled, intensified COBRA regimen resulted in a 90% rate of remission in 21 patients with RA. This remission rate exceeds the highest previously reported for early RA treatment (68% at 1 year).

The COBRA schedule comprised hydroxychloroquine (400 mg per day), sulfasalazine (2 g per day), methotrexate (10 mg per week) and high-dose prednisolone (60 mg per day tapered to 7.5 mg per day). After 8 and/or 21 weeks, treatment could be intensified if either 28-joint Disease Activity Score or levels of a marker of cartilage degradation remained above target. Treatment intensification at 8 weeks involved an increase in methotrexate dosage to 25 mg per week and, if targets were still not met, the option to add infliximab at 21 weeks. The methotrexate dose was increased in 10 patients, and infliximab was added to the regimen of 6 of these patients. Remission, defined as 28-joint Disease Activity Score <2.6, was achieved in 57% of patients at 8 weeks, 76% at 21 weeks and 90% at 40 weeks (the end of the study protocol).

As the authors suggest, this high remission rate probably relates to the tightly controlled and intensified COBRA regimen used in this study. This study was hampered by its small sample size and open-label design, but further studies in larger groups of patients with RA are clearly warranted.

Original article van Tuyl LH *et al.* (2008) Tight control and intensified COBRA combination therapy in early rheumatoid arthritis: 90% remission in a pilot trial. *Ann Rheum Dis* [doi:10.1136/ard.2008.090712]

Power Doppler ultrasonography is useful to evaluate clinical response to therapy

Ultrasonography is a noninvasive, readily available and inexpensive technique that is increasingly being used to assess inflammation in patients undergoing treatment for rheumatoid arthritis (RA). Data from small, single-center studies suggest this technique assesses joint inflammation more reliably than assessments of subjective clinical data. These findings have now been replicated in a large, longitudinal, multicenter study, which showed that power Doppler ultrasonography (PDUS) is a valid, reproducible and responsive method for monitoring inflammatory disease activity in patients with RA.

Naredo *et al.* enrolled 367 patients with RA who were beginning anti-tumor necrosis factor therapy and compared clinical, laboratory and PDUS assessments of joint inflammation conducted at baseline and at 1, 3, 6 and 12 months. At the end of the study, complete data were available on 278 patients. Improvements in PDUS-detected joint inflammation closely mirrored changes in clinical and laboratory indices of disease activity, which demonstrated the validity of PDUS assessment in this setting. In addition, PDUS assessment showed a high degree of intraobserver reliability, which indicated that this technique is highly sensitive to changes in inflammation.

This large, well-conducted study provides convincing evidence that PDUS should be used to monitor disease activity in patients with RA. However, a large number of these patients received concomitant treatment with a variety of DMARDs, corticosteroids and NSAIDs, which might have been a potential source of bias in the results. In addition, although interobserver reliability was good, this variable was investigated in only 20 patients.

Original article Naredo E *et al.* (2008) Power Doppler ultrasonographic monitoring of response to anti-tumor necrosis factor therapy in patients with rheumatoid arthritis. *Arthritis Rheum* **58:** 2248–2256

Non-contrast-enhanced MRI can accurately assess synovitis in patients with knee OA

Contrast-enhanced MRI is a validated technique used to assess synovitis in knee osteoarthritis; however, gadolinium can cause potentially fatal complications (e.g. nephrogenic systemic fibrosis) in patients with renal impairment. Pelletier and colleagues have now developed a novel, non-contrast-enhanced MRI method of scoring knee synovitis that might be sufficiently reliable and sensitive to use in assessments of synovitis progression.