IN BRIEF

RESEARCH HIGHLIGHTS

RHEUMATOID ARTHRITIS

In a 3-month study of patients with early, seropositive rheumatoid arthritis and no prior exposure to DMARDs, treatment with roxithromycin improved the signs and symptoms of the disease. A considerably greater proportion of patients who received 300 mg roxithromycin once-daily (n = 16) achieved a clinical response compared with placebo (n = 15). Improvements in 28-joint disease activity scores also occurred considerably more often in the roxithromycin group than the placebo group. Treatment with this macrolide antibiotic, which is active against oral anaerobic bacteria, was generally well tolerated.

Original article Ogrendik, M. Efficacy of roxithromycin in adult patients with rheumatoid arthritis who had not received disease-modifying antirheumatic drugs: a 3-month, randomized, double-blind, placebo-controlled trial. *Clin. Ther.* **31**, 1754–1764 (2009)

BONE

The 5-lipoxygenase inhibitor AA-861 accelerates fracture healing in rats, which suggests that manipulation of arachidonic acid metabolism could be used to improve the treatment of human fractures. Rats with closed femoral fractures treated with AA-861 showed decreased fracture-bridging times and increased formation of early callus cartilage and bone compared with vehicle-treated rats. The proliferation rate of callus cells was increased by AA-681 treatment in comparison with vehicle; by contrast, this rate was decreased by celecoxib treatment. Gene-expression analyses revealed that AA-861 treatment decreased levels of 5-lipoxygenase messenger RNA, and increased levels of cyclooxygenase-2 and osteopontin mRNA.

Original article Cottrell, J.A. & O'Connor, P. Pharmacological inhibition of 5-lipoxygenase accelerates and enhances fracture-healing. *J. Bone Joint Surg. Am.* **91**, 2653–2665 (2009)

CONNECTIVE TISSUE DISEASES

Ultrasonography could be a reliable and reproducible method for measuring dermal thickness in the digits of patients with systemic sclerosis (SSc). In a study involving 70 patients with SSc and healthy controls, ultrasonography detected skin thickening in the SSc patients, with low intra-observer and inter-observer variability. Stratification of the patients according to their disease phase revealed that skin thickness was higher in patients with edematous SSc than in those with fibrotic SSc. The results of ultrasonographic evaluation also correlated with skin sclerosis measurements obtained by use of the modified Rodnan skin score, the standard method of assessing dermal thickness in SSc.

Original article Kaloudi, O. *et al.* High frequency ultrasound measurement of digital dermal thickness in systemic sclerosis. *Ann. Rheum. Dis.* doi:10.1136/ard.2009.114843