# RESEARCH HIGHLIGHTS

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## **IN BRIEFS**

#### **RHEUMATOID ARTHRITIS**

A 4-week rheumatoid arthritis rehabilitation programme conducted in a warm, Mediterranean climate was associated with a significantly greater reduction in disease activity at 16 weeks compared with a similar programme conducted in a cold, Norwegian climate (P = 0.003). Improvements in disease activity and other measures of clinical response were sustained at 3 months in the warm group, but not in the cold group.

**Original article** Staalesen Strumse YA *et al.* (2008) The efficacy of rehabilitation for patients with rheumatoid arthritis: comparison between a 4-week rehabilitation programme in a warm and cold climate. *Scand J Rheumatol* **18**: 1–10

A retrospective analysis of data from a large US Veteran Affairs database has shown a significant association between rheumatoid arthritis (RA) and the risk for lung cancer. After adjusting for factors such as age, sex and exposure to tobacco, the investigators found that patients with RA were 43% more likely to develop lung cancer than patients without RA (odds ratio 1.43).

**Original article** Khurana R *et al.* (2008) Risk of development of lung cancer is increased in patients with rheumatoid arthritis: a large case control study in US veterans. *J Rheumatol* **35:** 1704–1708

#### PAIN MANAGEMENT

A randomized controlled trial has produced no evidence that manipulative therapy is beneficial in the management of acute lower back pain. Reductions in pain intensity, measured on an 11-point scale, and the level of consumption of analgesics were similar in patients receiving standard care (n = 52) or standard care and spinal manipulation (n = 52).

**Original article** Jüni P *et al.* (2008) A randomised controlled trial of spinal manipulation therapy in acute low back pain. *Ann Rheum Dis* [doi: 10.1136/ard.2008.093757]

### **CONNECTIVE TISSUE DISEASES**

Caveolin 1, a member of a family of proteins involved in endocytosis, has an important role in the pathogenesis of systemic sclerosis (SSc), and a study now suggests it might be involved in the pathogenesis of tissue fibrosis in this setting. Investigators found a marked decrease in caveolin 1 expression in the tissue of patients with SSc, and the development of fibrosis in the lungs and skin of caveolin 1 knockout mice. Restoring caveolin 1 function could be a new therapeutic approach in SSc.

**Original article** Galdo FD *et al.* (2008) Decreased expression of caveolin 1 in patients with systemic sclerosis: crucial role in the pathogenesis of tissue fibrosis. *Arthritis Rheum* **58**: 2854–2865

Brain abnormalities might appear very early in the disease course of systemic lupus erythematosus, even before a clinical diagnosis has been made. Brain MRI revealed the presence of cerebral atrophy in 18% and focal lesions in 8% of 97 patients with recently diagnosed systemic lupus erythematosus. Focal lesions were associated with greater clinical disease activity, and patients with cerebral atrophy were more likely to suffer from anxiety disorder.

**Original article** Petri M *et al.* (2008) Brain magnetic resonance imaging in newly diagnosed systemic lupus erythematosus. *J Rheumatol* [doi:10.3899/jrheum.081010]

#### **SPONDYLOARTHROPATHIES**

A retrospective study has provided evidence that adult-onset and juvenile-onset ankylosing spondylitis (AS) are distinct clinical entities. After adjusting for disease duration, adult-onset AS (n = 183) was associated with a greater prevalence of axial features (e.g. neck or back pain), worse functioning and quality of life, and a higher level of fatigue than juvenile-onset AS (n = 84).

**Original article** O'Shea FD *et al.* (2008) Comparison of clinical and radiographic severity of juvenile-onset versus adult-onset ankylosing spondylitis. *Ann Rheum Dis* [doi:10.1136/ard.2008.092304]