What causes hyperkyphosis in patients with ankylosing spondylitis?

Hyperkyphosis of the upper spine (i.e. the presence of a gap between the occiput and a wall, when the patient attempts to stand with heels, back and head touching the wall) affects up to half of patients with ankylosing spondylitis. Vosse *et al.* set out to define some of the clinical and radiographic features of this condition in a cohort of patients with ankylosing spondylitis of 9.4 years' mean duration.

In this cross-sectional study, 135 participants in OASIS (the Outcome in Ankylosing Spondylitis International Study), for whom complete data were available, were evaluated. Patients with hyperkyphosis of the upper spine ($n = 61$) were found to have a longer mean disease duration, and were more likely to be older males, than patients without hyperkyphosis. Hyperkyphosis was associated with structural damage to the cervical and lumbar spine (assessed with the modified Stoke Ankylosing Spondylitis Spine Score), wedging of the thoracic vertebrae, and radiographically visible hip involvement. On multivariate analysis, all these factors (except for radiographically visible hip involvement, which showed only a trend towards correlation with hyperkyphosis), were shown to be independent contributors to hyperkyphosis, as was disease activity (assessed with the Bath Ankylosing Spondylitis Disease Activity Index).

The authors propose that the vertebral wedging observed in patients with hyperkyphosis is caused by periarticular bone loss (osteoporosis) in the spine. New treatments for patients with ankylosing spondylitis should, therefore, aim to prevent both the osteoporosis and the structural damage to the spine that contribute to hyperkyphosis.

Original article Vosse D *et al.* (2006) Determinants of hyperkyphosis in patients with ankylosing spondylitis. *Ann Rheum Dis* **65:** 770–774

Patients' leisure and social activities are greatly affected by RA

Rheumatoid arthritis (RA) is associated with functional limitations, which can lead to disability. Disability influences both patients' physical functioning and psychological wellbeing, but previous studies have only evaluated RA disability in relation to employment and daily living. Katz *et al*. have confirmed the link between functional limitation and disability; however, they found that patients' day-to-day activities were less affected by RA than their leisure and social activities. It remains unclear whether patients voluntarily relinquish leisure activities in favor of obligatory ones.

Katz *et al*. evaluated data from annual telephone interviews of 548 individuals with RA who were enrolled in a US panel study. The authors assessed disability in relation to 26 valued life activities: 'obligatory' activities included self care, walking and using transport; 'committed' activities included paid work, household responsibilities and family care; and 'discretionary' activities included leisure and social activities. Participants rated the difficulty of performing the 26 activities (activities unimportant to the individual were not scored). Functional impairment was assessed using the Heath Assessment Questionnaire.

Committed (heavy housework, repairs, paid work) and discretionary (gardening, physical activity and hobbies) activities were most affected by RA, and were also rated most difficult to perform. By contrast, obligatory activities were rated least difficult, and were least affected by RA. Almost every patient reported that at least one activity was affected by RA (committed or discretionary activities in >90% of patients, and obligatory activities in 68%). Almost half were unable to undertake at least one activity—principally in the discretionary category.

Original article Katz PP *et al.* (2006) Prevalence and predictors of disability in valued life activities among individuals with rheumatoid arthritis. *Ann Rheum Dis* **65:** 763–769

Hand bone mineral density loss is a sensitive marker of outcome in early RA

Early diagnosis and treatment of patients with rheumatoid arthritis (RA) improves patient outcomes. Although it can be difficult to distinguish early RA from other inflammatory conditions, periarticular bone mineral density (BMD) loss (especially in the hands) is a feature of early RA that can be measured accurately. Haugeberg