Orthopaedic surgery in patients with rheumatoid arthritis and ankylosing spondylitis

An investigation of changes over time and with improved treatment

Introduction There has been a growing emphasis on diagnosing and treating rheumatoid arthritis early and intensively with the goal of preventing disability and reducing mortality. The introduction of anti-TNF agents in 1999 has further improved the treatment of rheumatoid arthritis, providing disease control in patients for whom other treatment modalities are not sufficient. These agents have also revolutionised the treatment of patients with ankylosing spondylitis, although no certain influence on the development of spinal ankylosis and joint destruction has been documented. We wished to investigate the the use of orthopaedic surgery in patients with ankylosing spondylitis and rheumatoid arthritis, changes over time and any relation to the recent decades' change in medication.

Patients and methods Data on orthopaedic surgery in patients with rheumatoid arthritis and ankylosing spondylitis was obtained from the Norwegian Arthroplasty Register, the Norwegian Patient Register and Haukeland University Hospital's administrative patient system. We also reviewed the medical history of 1010 patients with rheumatoid arthritis.

Results and Conclusions Our findings suggest that TNF-alpha inhibitors may have altered the prognosis of patients with ankylosing spondylitis by inhibiting or slowing large joint arthritis and thus reducing the need for hip replacement surgery. We also found a decrease in orthopaedic surgery in patients with rheumatoid arthritis. The general increasing trend in the use of synthetic and biologic disease modifying anti rheumatic drugs (DMARDs) thus coincides with less joint destruction and an improved long term prognosis of patients with rheumatoid arthritis.

Further work Using the data from our journal reviews, we will characterise these patients with rheumatoid arthritis, investigate the changes in treatment over time, and try to find risk factors for undergoing orthopaedic surgery.