

Risedronate reduces BMD loss after hip replacement

Periprosthetic bone resorption is a complication of cementless total hip arthroplasty (THA). Part of the stress that would normally be experienced by the femur is borne by the implant, leading to bone remodeling, and this resorption can lead to loosening of the implant. Bisphosphonate therapy has been shown to protect against bone resorption after THA. As no data so far exist on the effect of risedronate in this setting, Yamasaki *et al.* conducted a randomized, placebo-controlled study of the effect of risedronate on periprosthetic bone resorption after cementless THA.

Participants were randomly allocated to placebo ($n=21$) or risedronate (2.5 mg/day; $n=22$) for 6 months after undergoing cementless THA. Three patients in the risedronate group withdrew because of dyspepsia. BMD in the proximal femur (which was divided into seven zones) was measured 3 weeks and 6 months postoperatively by dual-energy X-ray absorptiometry. There was no significant difference in BMD between the groups at 3 weeks; these values were used as baseline figures. At 6 months, BMD decrease was significantly less in the risedronate group than in the placebo group in the five most proximal zones; BMD ranged from 79.8% to 91.1% of baseline in the placebo group, and from 88.1% to 100.9% of baseline in the risedronate group. There was no significant difference in BMD loss in the two most distal zones.

The authors conclude that risedronate helps to protect against periprosthetic bone resorption after cementless THA.

Original article Yamasaki S *et al.* (2007) Risedronate reduces postoperative bone resorption after cementless total hip arthroplasty. *Osteoporos Int* **18**: 1009–1015

Rheumatoid factor is an independent risk factor for heart disease

People with rheumatoid arthritis (RA) are at increased risk of developing ischemic heart disease (IHD). Rheumatoid factor (RF) is strongly associated with RA, but is also associated with other inflammatory disorders and with infections, and is present in up to 15% of all adults. Edwards *et al.* hypothesized that RF might be

a marker for IHD in the general population. In a cross-sectional analysis, the researchers investigated the relationship between RF and IHD in 567 men and 589 women (aged 59–71 years) who took part in the Hertfordshire Cohort Study.

After adjusting for known risk factors (BMI, smoking, family history, diabetes mellitus, hypertension and HDL:LDL ratio), RF conferred a 2.9-fold increased risk of IHD in men. The relationship was dose-independent. In women, no significant association was found between RF and IHD. Tests for antinuclear and anticardiolipin antibodies showed no relationship between these factors and IHD in men or women.

The authors conclude that RF is an independent risk factor for IHD in men. The results highlight the importance of inflammation in atherosclerosis, but whether RF is merely a marker of inflammation or has a role in the pathogenesis needs to be investigated in a longitudinal study.

Original article Edwards CJ *et al.* (2007) The autoantibody rheumatoid factor may be an independent risk factor for ischaemic heart disease in men. *Heart* [doi: 10.1136/hrt.2006.097816]

Exercise and advice have a small beneficial effect on subacute low back pain

Primary care consultation for low back pain is extremely common, but evidence-based treatment in the subacute phase (between 6 weeks and 3 months) is difficult because evidence for the effectiveness of available treatments is lacking. Pengel *et al.* conducted a factorial, randomized, placebo-controlled trial to investigate the effectiveness of exercise, advice, or both for alleviating subacute back pain.

The study was conducted in seven physiotherapy clinics in Australia and New Zealand, and included 259 participants with nonspecific low back pain lasting for ≥ 6 weeks but no longer than 12 weeks. Participants were randomly allocated to exercise (a physiotherapist-directed, individualized program) and advice (information on the condition and encouragement for a graded return to normal activities), exercise and sham advice (empathy with patient's concerns but without advice), sham exercise (sham-pulsed ultrasound and