

## Increased fracture risk in women with CVD

Studies have uncovered an association between cardiovascular disease (CVD) and impaired bone mineral metabolism, but it is unknown if a link exists between CVD and osteoporotic fracture. Sennerby *et al.*, therefore, conducted a population-based case-control study in six Swedish counties (total population >4 million) to investigate whether CVD increases the risk of osteoporotic fracture in women.

The study population consisted of 1,327 women aged 50–81 years who suffered a hip fracture between October 1993 and February 1995, and 3,170 matched controls. Fractures due to malignancy or high-energy trauma were excluded. Fracture cases had lower BMI than controls, were more likely to smoke, abstain from alcohol, not to have used hormone replacement therapy, and were less physically active. CVD was present before study entry in 25% of fracture cases versus 12% of controls. After controlling for lifestyle variables and other chronic diseases, CVD (especially hypertension, heart failure and cerebrovascular lesions) conferred an odds ratio for hip fracture of 2.38. The risk of hip fracture increased with number of hospitalizations for CVD, and was particularly high after a recent CVD event—odds ratio 7.61 for fracture within 180 days of hospitalization for CVD.

The mechanism by which CVD influences fracture risk remains to be determined. The authors suggest that impaired calcium metabolism or increased oxidative stress in CVD could affect bone mineral metabolism; alternatively, they suggest that side effects of medication for CVD might increase the risk of falls.

**Original article** Sennerby U *et al.* (2007) Cardiovascular diseases and future risk of hip fracture in women. *Osteoporos Int* 18: 1355–1362

## Nonfunctioning pituitary adenomas: the consequences of a 'watch and wait' approach

Clinically nonfunctioning pituitary adenomas (NFAs) account for 14.7% of all pituitary adenomas. Since they are not associated with hormonal hypersecretion, most are recognized only when they put pressure on surrounding tissues and cause headaches, visual problems or pituitary hormone deficits.

Symptomatic tumors are treated by surgery followed by radiotherapy to ease symptoms; however, this result is not always achieved, and vision deteriorates after surgery in some patients. Assessing an alternative 'watch and wait' policy is difficult because of the limited number of patients available.

In order to identify factors that could predict which tumors were likely to increase in size, Karavitaki *et al.* investigated the outcome of a series of consecutive patients with presumed NFAs (microadenoma or macroadenoma) who, for various reasons, were not offered treatment.

They studied 40 patients, of whom 16 had microadenoma and 24 had macroadenoma. During the follow-up period (mean duration 42 months), 12.5% of the microadenomas and 50.0% of the macroadenomas increased in size. Patients with macroadenoma were more likely to experience worsening of visual field defects, particularly if their tumor enlarged. No microadenoma enlarged to cause visual deterioration.

The authors conclude that a 'watch and wait' policy is reasonable for microadenomas but not for macroadenomas, which seem to have a notable growth potential. The choice between surgery and watch and wait should balance the risks of surgery against the probability of tumor enlargement and the loss of advantages associated with an early operation.

**Original article** Karavitaki N *et al.* (2007) What is the natural history of nonoperated nonfunctioning pituitary adenomas? *Clin Endocrinol (Oxf)* [doi:10.1111/j.1365-2265.2007.02990.x]

## Discontinuation of therapy in men with idiopathic hypogonadotropic hypogonadism

A congenital defect in the release or action of gonadotropin-releasing hormone (GnRH) can cause idiopathic hypogonadotropic hypogonadism, a condition that results in male infertility. Patients with this condition have incomplete or absent sexual maturation by the age of 18 years and were previously thought to require life-long treatment. Raivio and colleagues carried out a study to investigate whether discontinuation of hormonal therapy could cause neuroendocrine and gonadal reversal of idiopathic hypergonadotropic hypogonadism.