## No link between androgen receptor gene polymorphisms and heart disease

As heart disease is more prevalent in men than in women, a role for androgens has been proposed. Cardiovascular risk factors are thought to be associated with the number of cytosine–adenine–guanine (CAG) repeats in exon 1 of the androgen-receptor gene. Previous studies, however, have produced inconsistent results. Page *et al.* studied DNA sequence data from over 1,000 men who participated in the Massachusetts Male Aging Study, and found that the number of CAG repeats was not associated with the development of heart disease.

Cross-sectional and longitudinal analyses revealed no association between the number of CAG repeats and the development of heart disease; neither did they demonstrate any associations between the number of CAG repeats and cardiovascular risk factors such as BMI, waist-to-hip ratio, LDL level or HDL level.

As participants in the Massachusetts Male Aging Study were representative of the Boston population, 97% of the study participants were white. It is possible, therefore, that the number of CAG repeats might be associated with heart disease in different ethnic groups. It should also be noted that this analysis only had enough statistical power to detect differences of >15%, so smaller, but still significant, differences might have been missed.

**Original article** Page ST *et al.* (2006) The androgen receptor gene CAG repeat polymorphism does not predict increased risk of heart disease: longitudinal results from the Massachusetts Male Ageing Study. *Clin Endocrinol* **65:** 333–339

## The effect of lesion type on central precocious puberty

Central precocious puberty (CPP) is often associated with a lesion in the central nervous system. The type of lesion and whether or not patients receive treatment differs, but there are few data on how these factors affect the manifestations of CPP. Accordingly, a French team conducted a study of 100 consecutive patients with CPP, to assess the influence of lesion type and treatment on initial presentation, hypothalamic–pituitary function, and final height.

In total, 33 boys and 67 girls presented with either optic glioma or astrocytoma ($n = 45$), hydrocephalus ($n = 22$), hypothalamic hamartoma ($n = 15$), suprasellar arachnoid cysts ($n = 10$), or other lesions ($n = 8$). At initial presentation, boys with hypothalamic hamartoma were taller and had higher bone age, luteinizing-hormone peak, and plasma testosterone levels than boys with optic glioma; girls with suprasellar arachnoid cysts or hypothalamic hamartoma were younger and had a higher luteinizing-hormone peak than girls with any other type of lesion.

Hypothalamic–pituitary deficiencies were observed in all patients treated for optic glioma, and suprasellar arachnoid cysts were also associated with these deficiencies. Patients who received treatment with a gonadotropin-releasing-hormone analog or growth hormone had normal final heights, whereas untreated patients (who showed only moderate signs or had residual lesions) had below-average final heights.

The authors conclude that the influence of lesion type and treatment on the manifestations of CPP is at least partly mediated by hypothalamic–pituitary deficiencies related to the lesion and its treatment.

**Original article** Trivin C *et al.* (2006) Presentation and evolution of organic central precocious puberty according to the type of CNS lesion. *Clin Endocrinol* **65:** 239–245

## No need to treat obese children with hyperthyrotropinemia

In this cross-sectional study, Reinehr and colleagues investigated whether hyperthyrotropinemia was a cause or consequence of obesity and, therefore, whether or not thyroxine treatment should be indicated in obese children with this condition.

The authors evaluated 246 obese children who attended an obesity-intervention program, which was based on exercise, nutritional education and behavior therapy, and 71 lean children matched for age, sex, and Tanner stage. Participants were followed for 1 year. Obese children were found to have increased levels of serum TSH and free $T_3$ concentrations compared with lean children. Levels of TSH and free $T_3$ normalized, however, in initially obese children who lost a substantial amount of weight by the end of the study. Free $T_4$ levels did not