

identified 628 hypopituitary women aged <50 years, of whom 315 were taking estrogen therapy and 313 (who had normal gonadal function) were not. The estrogen therapy was oral in 86% of cases and transdermal in 14%. No difference was found in weight, waist : hip ratio or body composition in women taking the different forms of estrogen. Women taking oral estrogen, but not women taking it transdermally, had a greater waist : hip ratio, compared with women not taking estrogen and with normal gonadal function after 1 year of growth-hormone treatment. Patients taking oral ethinylestradiol had lower IGF-I levels than patients not treated with estrogen or those taking transdermal estradiol.

The authors conclude that most women of fertile years with hypopituitarism are taking oral estrogen, and that these women have a greater waist : hip ratio compared with women not taking estrogen therapy after 1 year of growth-hormone therapy.

Marie Lofthouse

Original article Mah PM *et al.* (2005) Estrogen replacement in women of fertile years with hypopituitarism. *J Clin Endocrinol Metab* **90**: 5964–5969

Longer duration of lactation reduces maternal risk of type 2 diabetes

Many studies have demonstrated that lactation is associated with improved insulin sensitivity and glucose tolerance. The link between maternal lactation and risk of type 2 diabetes, however, is not yet clear.

Stuebe *et al.*, therefore, studied the association between lactation and risk of type 2 diabetes in women who took part in the Nurses' Health Study (NHS), a prospective observational cohort of 83,585 parous women, and NHS II, a retrospective observational cohort of 73,418 parous women.

In the NHS cohort, there were 5,145 cases of type 2 diabetes during 1,239,709 person-years of follow-up between 1986 and 2002. This compared with 1,132 cases of type 2 diabetes during 778,876 person-years of follow-up between 1989 and 2001, in the NHS II cohort. Both studies showed that greater duration of lactation was associated with a reduced risk of type 2 diabetes in young and middle-aged women. This association was independent of

BMI, exercise and smoking status. In women who reported a birth in the previous 15 years, for each additional year of breast-feeding there was a decrease in the risk of diabetes of 15% (95% CI 1–27%) and 14% (95% CI 7–21%) in the NHS and NHS II cohorts, respectively.

The authors conclude that a long duration of lactation might reduce the risk of type 2 diabetes in young and middle-aged women by improving glucose homeostasis, but that further clinical studies are needed to confirm this idea.

Marie Lofthouse

Original article Stuebe AM *et al.* (2005) Duration of lactation and incidence of type 2 diabetes. *JAMA* **294**: 2601–2610

Subtotal versus total thyroidectomy for patients with Graves' eye disease

It is well established that thyroid resection has a distinct role in the treatment of endocrine ophthalmopathy in patients with Graves' disease, but the recommended extent of this surgery is still a matter of debate.

Järhult *et al.* recruited 44 patients with Graves' disease and moderate-to-severe endocrine ophthalmopathy from 10 hospitals in Sweden. Inclusion criteria included preoperative treatment with antithyroid drugs for at least 3 months and a state of euthyroidism at the time of the operation. Overall, 21 patients were randomly assigned to subtotal thyroidectomy, which leaves approximately 2g of thyroid remnant, and 22 patients were assigned to total thyroidectomy. After surgery, patients were followed up at 4–6 weeks, 3 and 6 months, and at 1, 1.5, 2 and 3 years. One patient was lost to follow-up and, therefore, excluded from the study.

Fewer complications occurred in the subtotal-resection compared with the total-resection group (1 versus 5, respectively; $P < 0.01$). Eye disease improved in all cases, and there was no difference in upper lid retraction, conjunctival injection, chemosis, edema of the eyelids, papillary edema, visual acuity, proptosis and motility between the two treatment groups during 3 years of follow-up.

The authors conclude that total thyroidectomy has no advantage over a subtotal thyroidectomy that leaves 2g of thyroid remnant, and that the latter is the optimum