

procedure in patients with Graves' disease and active endocrine ophthalmopathy because of the low risk of surgical complications.

Marie Lofthouse

Original article Järhult J *et al.* (2005) Graves' disease with moderate–severe endocrine ophthalmopathy—long term results of a prospective, randomized study of total or subtotal thyroid resection. *Thyroid* 15: 1157–1164

Long-term follow-up of women with postpartum thyroiditis

There is a lack of consensus over if, and when, pregnant women should be routinely screened for subclinical thyroid disease. Postpartum thyroiditis is a common condition that occurs during the first year after delivery and is characterized by transient thyrotoxicosis, with or without hypothyroidism. A high proportion of affected women develop persistent hypothyroidism (PH), which negatively influences the outcome of future pregnancies.

Lucas *et al.* collected long-term follow up data for 42 women (aged 19–40 years) with postpartum thyroiditis, who were followed up every 3 months during the first postpartum year, then once or twice annually thereafter (mean 8.2 ± 2.2 years). During follow-up, 10 women had a subsequent pregnancy, and in 5 of these women postpartum thyroiditis recurred. Over the study period, 14 women developed PH; 4 cases were in women who had a subsequent pregnancy. PH occurred only in women whose postpartum thyroiditis episode included hypothyroidism. The risk of developing PH was higher if the baby was a girl ($P < 0.05$), and increased with increasing TSH concentration during the episode of postpartum thyroiditis ($P = 0.004$).

The sixth month postpartum is the ideal time to diagnose postpartum thyroiditis and to identify women at risk of developing PH, say the authors. In their study, 37 women had hormone abnormalities at the sixth-month postpartum check, including all those who later developed PH (all 14 of these had TSH levels > 6 mIU). Screening would enable levothyroxine treatment to be initiated in those at risk, so that levels of TSH could be normalized before any subsequent pregnancies.

Caroline Barranco

Original article Lucas A *et al.* (2005) Postpartum thyroiditis: long-term follow-up. *Thyroid* 15: 1177–1181

Beneficial effects of cereal fiber on glucose metabolism

Insulin secretion after eating is stimulated by increased blood glucose and secretion of glucose-dependent insulinotropic polypeptide (GIP) and glucagon-like peptide 1 (GLP-1). Insoluble fiber is associated with a reduced risk of type 2 diabetes, but interpretation of the effects of whole grains on glucose metabolism can be difficult, because of the presence of other potentially active ingredients, such as protein, antioxidants and phytoestrogens.

Researchers in Germany have studied the effect of purified insoluble cereal fibers on glucose, insulin, GIP and GLP-1 in 14 healthy women with normal glucose tolerance. On six to eight occasions, subjects consumed three matched portions of bread enriched with wheat fiber, oat fiber, resistant starch, or control bread, and the next day consumed three portions of control bread. The insulin response on day 1 was earlier for both wheat and oats than for control. GIP response was also earlier after oat-fiber consumption, but GLP-1 was not affected by any fiber. Those who consumed fiber-enriched bread on day 1 had a reduced glucose response after consumption of control bread on day 2. Fiber enrichment had no effect on insulin, GIP or GLP-1 levels on day 2.

The authors suggest that improved glucose handling might result from increased insulin sensitivity or non-insulin-dependent glucose uptake. They conclude that diet enrichment with insoluble cereal fiber offers a means to improve carbohydrate metabolism, but that the findings need to be confirmed in larger studies that include diabetic patients. More work is also needed to discover the mechanisms underlying the effects seen in the study.

Jim Casey

Original article Weickert MO *et al.* (2005) Impact of cereal fibre on glucose-regulating factors. *Diabetologia* 48: 2343–2353

Obesity-related insulin resistance is reversible after weight loss

Obesity is characterized by an increase in the number (hyperplasia) and size (hypertrophy) of adipocytes, and by insulin and catecholamine resistance. The basal rate of lipolysis is higher