

different results because they did not adjust for these potentially confounding variables.

The authors conclude that their data do not show any association between subclinical thyroid dysfunction and cognitive impairment, depression or anxiety in the elderly. These results, however, might be biased by the low participation rate and the low prevalence of subclinical thyroid dysfunction in the study group.

Original article Roberts LM *et al.* (2006) Is subclinical thyroid dysfunction in the elderly associated with depression or cognitive dysfunction? *Ann Intern Med* 145: 573–581

Increasing HbA_{1c} levels predict the onset of type 1 diabetes in high-risk children

Currently, there is no method to predict the onset of type 1 diabetes (T1D). Stene and colleagues investigated the efficacy of glycated hemoglobin (HbA_{1c}) level (which can predict onset of type 2 diabetes) as a predictor of progression from islet autoimmunity to overt T1D.

The authors enrolled 92 children (mean age 4.8 years) who carried human leukocyte antigen genotypes associated with T1D or had first-degree relatives with T1D, and were positive for at least one islet autoantibody on at least two consecutive clinic visits. In total, 28 children developed T1D, at a median age of 6.5 years; 75% of these had first-degree relatives with the disease. Children who went on to develop T1D were slightly younger and had autoantibodies against a significantly higher number of islet antigens than children who did not ($P=0.008$), although both groups had similar initial plasma glucose and HbA_{1c} levels. Each increase of 1 SD (0.4%) in HbA_{1c} levels was associated with a fivefold increase in the risk of progression to T1D. By contrast, each increase of 1 SD (1.1 mmol/l) in random plasma glucose levels resulted in only a slight (1.4-fold) increase in the risk of progression to T1D.

The authors conclude that rising HbA_{1c} levels (even within the normal range) over time indicate progressive disruption of glucose regulation, and accurately predict the onset of T1D in high-risk children.

Original article Stene LC *et al.* (2006) Normal but increasing hemoglobin A1c levels predict progression from islet autoimmunity to overt type 1 diabetes: Diabetes Autoimmunity Study in the Young (DAISY). *Pediatr Diabetes* 7: 247–253

Skin characteristics are affected by growth hormone in Sheehan's syndrome

One of the symptoms of Sheehan's syndrome (postpartum hypopituitarism) is severe growth-hormone deficiency (GHD). Growth-hormone receptors are present in human skin and, therefore, Tanriverdi and colleagues investigated whether GHD itself, and treatment for GHD—6-months of growth-hormone replacement therapy—had any effect on skin characteristics in patients with Sheehan's syndrome.

The study involved 16 women with Sheehan's syndrome who had severe GHD, and 20 healthy control women of similar age and menopausal status. Patients with GHD were treated with either recombinant growth hormone (10 patients) or placebo (6 patients) for 6 months. Growth hormone was self-administered at an initial once-nightly dose of 0.45 IU for 1 month, followed by once-nightly doses of 0.9 IU during the subsequent month and 1.5–1.8 IU during the next 4 months.

At baseline, sebum content and skin hydration on the forehead and hydration on the forearm were lower in patients with GHD than in controls. After 6 months of growth-hormone treatment, only sebum content on patients' foreheads had increased significantly ($P<0.05$). In the placebo-treated group, no skin changes were observed.

The authors conclude that this is the first demonstration of the effects of GHD and growth-hormone replacement therapy on the skin by noninvasive, objective methods. Their results imply that growth hormone might have a modulatory role on some skin characteristics.

Original article Tanriverdi F *et al.* (2006) Investigation of the skin characteristics in patients with severe GH deficiency and the effects of 6 months of GH replacement therapy: a randomized placebo controlled study. *Clin Endocrinol* 65: 579–585

Bromocriptine improves the metabolic profile of obese women

In obese, insulin-resistant animals, treatment with the dopamine D2 receptor (D2R) agonist bromocriptine causes reversion to a lean, insulin-sensitive state. Kok and colleagues, therefore, studied the effects of short-term bromocriptine treatment on metabolic variables in humans.