the sibutramine group than in the placebo group (both $P<0.01$). Compared with the placebo group, the sibutramine group also showed significantly greater reductions in triglyceride level, cystatin C level and free androgen index, and a significantly greater increase in sex-hormone-binding globulin level (all $P<0.05$). Weight loss in response to sibutramine treatment was associated with young age and low sex-hormone-binding globulin level at baseline.

The authors conclude that sibutramine plus lifestyle modification reduces body weight in women with PCOS, and also seems to have beneficial effects on metabolic and cardiovascular risk factors.

Original article Lindholm Å *et al.* (2008) Effect of sibutramine on weight reduction in women with polycystic ovary syndrome: a randomized, double-blind, placebo-controlled trial. *Fertil Steril* **89:** 1221–1228

Aberrant cortisol metabolism might cause alcoholic pseudo-Cushing syndrome

In vivo, type 1 11β-hydroxysteroid dehydrogenase converts inactive cortisone to active cortisol, primarily in the liver, whereas the type 2 isoenzyme catalyzes the reverse process, mainly in the kidney. Ahmed and colleagues previously reported that patients with alcoholic liver disease (ALD) had increased urinary ratios of cortisol to cortisone metabolites. These authors have now demonstrated that patients with alcohol-induced, pseudo-Cushing syndrome have normal secretion but aberrant metabolism of cortisol.

The study included 20 patients with histologically confirmed ALD, 19 with chronic nonalcoholic liver disease (NLD), and 6 otherwise healthy controls with presumed primary aldosteronism. Cortisol concentrations in hepatic venous blood were significantly higher in patients with ALD than in either patients with NLD or controls. However, there were no differences between groups with regard to renal function or renal-vein cortisone concentrations, which suggested that type 2 11β-hydroxysteroid dehydrogenase levels and activity were unaffected. *In vitro* studies suggested that upregulation of the type 1 isoenzyme rather than alteration of its activity caused the increased hepatic production of cortisol; in liver samples from a different cohort (seven patients with ALD, nine with NLD and six healthy individuals), expression of type 1 11β-hydroxysteroid dehydrogenase mRNA was fivefold greater in patients with ALD than in controls.

The researchers speculate that induction of the type 1 isoenzyme might protect against alcohol-induced hepatic injury. Generation of cortisol in the liver might dampen the inflammatory response and thus limit tissue damage.

Original article Ahmed A *et al.* (2008) Induction of hepatic 11β-hydroxysteroid dehydrogenase type 1 in patients with alcoholic liver disease. *Clin Endocrinol* **68:** 898–903

The Neuropad test is an effective screening tool for diabetic neuropathy

Peripheral neuropathy is commonly associated with diabetes mellitus. Early detection of nerve damage could help to prevent the development of pain and foot ulceration. The authors compared the diagnostic value of established clinical tests of somatic and autonomic neuropathy with that of the Neuropad test. In this test, plantar sweat production causes a quantifiable color change in the pad from blue to pink. Abnormal results indicate sudomotor dysfunction, and hence peripheral neuropathy.

The 57 diabetic patients included in the study underwent assessment of the neuropathy disability score, the neuropathy symptom score, and quantitative sensory function tests that indicate small-fiber denervation. A Neuropad was applied to the plantar aspect of one great toe and the color change was evaluated after 10 min. Structural changes in nerve-fiber density were assessed in foot skin biopsies.

Neuropad results correlated with neuropathy disability score ($r=0.450$, $P<0.001$), neuropathic symptom score ($r=0.288$, $P=0.03$), heat-as-pain perception threshold ($r=0.279$, $P=0.043$), cold detection threshold ($r=0.394$, $P=0.003$) and deep-breathing heart rate variability ($r=–0.525$, $P<0.001$), as well as with intra-epidermal nerve fiber density ($r=–0.271$, $P=0.04$). The Neuropad test detected clinically relevant neuropathy with a sensitivity of 85% (negative predictive value 71%) and specificity of 45% (positive predictive value 69%). The authors conclude that the non-invasive Neuropad test is a simple and reliable tool for detecting peripheral neuropathy that could be used to screen diabetic patients.

Original article Quattrini C *et al.* (2008) The Neuropad test: a visual indicator test for human diabetic neuropathy. *Diabetologia* **51:** 1046–1050