

directors) provided detailed information on diabetes-management strategies. Intensive diabetes management correlated with improved care processes (although all providers scored highly); there were, however, no clinically meaningful effects on patient outcomes, perhaps because the analyses were based on  $\leq 3$  years of diabetes management.

**Original article** Mangione CM *et al.* (2006) The association between quality of care and the intensity of diabetes disease management programs. *Ann Intern Med* 145: 107–116

## Oxcarbazepine increases the levels of some androgens

Oxcarbazepine is a relatively new antiepileptic drug with a similar efficacy to carbamazepine, but its effect on the reproductive endocrine function of women is unknown. Results of a recent study, however, indicate that oxcarbazepine is associated with an increase in the levels of some androgens and in the prevalence of polycystic ovaries.

Löfgren and colleagues from Finland recruited 35 women with epilepsy who were receiving monotherapy with either carbamazepine ( $n=16$ ) or oxcarbazepine ( $n=19$ ), and 36 healthy female controls. They carried out neurological and gynecological examinations of the participants, and collected blood samples during the early follicular phase of their menstrual cycles to analyze serum samples of reproductive hormones.

Although patients taking either carbamazepine or oxcarbazepine had lower serum levels of testosterone and free androgen than controls, patients taking oxcarbazepine were found to have higher serum levels of androstenedione and dehydroepiandrosterone sulfate than patients taking carbamazepine. There was also a higher prevalence of polycystic ovaries among patients receiving oxcarbazepine than in carbamazepine or control subjects.

The authors conclude that carbamazepine and oxcarbazepine appear to have differing effects on the reproductive endocrine function of women with epilepsy, and that oxcarbazepine could adversely affect women with epilepsy and hyperandrogenism. They add that further studies are needed to establish whether the

endocrine changes are a result of the epilepsy itself or of the oxcarbazepine.

**Original article** Löfgren E *et al.* (2006) Effects of carbamazepine and oxcarbazepine on the reproductive endocrine function in women with epilepsy. *Epilepsia* [doi: 10.1111/j.1528-1167.2006.00506.x]

## Preoperative nutritional status of Roux-en-Y gastric bypass candidates

As the number of Roux-en-Y gastric bypass (RYGB) procedures performed each year continues to rise, so too does concern for postoperative vitamin and mineral deficiencies, which might predispose patients to serious neurologic and metabolic complications. To decrease the risk of such postoperative complications it would be beneficial to identify and correct deficiencies as early as possible; however, there are limited data on the preoperative nutritional status of patients undergoing RYGB.

Flancbaum and colleagues retrospectively evaluated the preoperative nutritional status of 379 morbidly obese patients (320 women, 59 men) who underwent RYGB. Deficiencies were detected in 68.1% of patients for 25-OH vitamin D, in 43.9% for iron, in 29% for thiamine, in 22% for hemoglobin, and in 8.4% for ferritin. No abnormalities in vitamin B<sub>12</sub> levels were detected. Low ferritin levels were more common in women; however, anemia was markedly more common in men. There were ethnic differences in patients' preoperative nutritional status; White patients were less likely to be thiamine-deficient than African American and Hispanic patients, but were more likely to be vitamin-D-deficient than Hispanic patients.

The authors conclude that preoperative vitamin and mineral deficiencies are common in patients scheduled to undergo RYGB; they highlight the importance of the early detection and treatment of thiamine and vitamin D deficiencies, to avoid serious postoperative neurologic and metabolic complications.

**Original article** Flancbaum L *et al.* (2006) Preoperative nutritional status of patients undergoing Roux-en-Y gastric bypass for morbid obesity. *J Gastrointest Surg* 10: 1033–1037