OBESITY

Orlistat 60 mg reduces levels of visceral adipose tissue in obese individuals

Excess visceral adipose tissue is an important predictor of metabolic risk factors for coronary artery disease. Orlistat is a weight-loss drug (taken in conjunction with a reduced-calorie, low-fat diet) that acts by reducing the absorption of dietary fat. Orlistat 120 mg has been available as a prescription drug for more than 10 years, and previous studies have demonstrated that it is able to reduce levels of visceral adipose tissue more effectively than diet alone despite similar weight loss.

© iStockphoto

60 mg orlistat capsules have now been approved in the USA and Europe and can be obtained without a prescription. This dose has been shown to have ~85% efficacy of the 120 mg dose, but no studies have investigated the effect of 60 mg on changes in adipose tissue distribution. “The purpose of the present study was, for the first time, to investigate whether 60 mg orlistat results in a significantly greater change in visceral adipose tissue following 24 weeks of treatment as compared to placebo,” the authors write.

They conducted a multicenter, randomized, double-blind, placebo-controlled study. 131 individuals with a BMI of 25–34.9 kg/m² and a waist circumference for females of >88 cm and for males of >102 cm were included in the study. Patients were instructed to consume a reduced-calorie, low-fat diet and were randomly allocated to receive orlistat 60 mg or placebo for 24 weeks. Visceral adipose tissue was measured by CT.

All patients had a significant reduction in their levels of visceral adipose tissue after 24 weeks. This reduction was significantly greater in patients who received orlistat. In addition, patients who received orlistat had significantly greater weight loss and total fat mass loss compared with those who received placebo. In both groups, adverse events were most common in the gastrointestinal system, and most adverse events were rated as mild.

“[T]hese findings suggest that orlistat 60 mg may be an effective weight loss tool that can help reduce cardiometabolic risk associated with upper body adiposity,” the authors conclude.

Isobel Franks

Original article Smith, S. R. *et al.* Orlistat 60 mg reduces visceral adipose tissue: a 24-week randomized, placebo-controlled, multicenter trial. *Obesity* doi:10.1038/oby.2011.143