

## Optimum treatment for hypertension during sibutramine-induced weight loss

Hypertension is common in obese patients and its treatment should be considered when planning a pharmacologic weight-loss program. Now, Scholze and co-workers have studied the effects of sibutramine therapy on obese patients being treated for hypertension.

This prospective, double-blind trial included 171 obese or overweight patients (BMI 27–45 kg/m<sup>2</sup>) with essential hypertension (systolic blood pressure 140–160 mmHg; diastolic blood pressure 90–100 mmHg) who were on one of three antihypertensive regimens: felodipine–ramipril (5 mg/5 mg; *n* = 57), slow-release verapamil–trandolapril (180 mg/2 mg; *n* = 55), or metoprolol succinate–hydrochlorothiazide (95 mg/12.5 mg; *n* = 59). After a 2-week run-in period, patients were randomly allocated to 10 mg/day of sibutramine (*n* = 87) or placebo (*n* = 84), increased to 15 mg/day after 8 weeks.

In the 145 patients who completed the 16-week treatment, decreases in body weight, BMI, and waist circumference were greater in the sibutramine group than in the placebo group (*P* < 0.0001 for all); however, weight loss was significantly attenuated in the metoprolol–hydrochlorothiazide cohort compared with those receiving one of the other two antihypertensive regimens. In comparison with placebo, sibutramine improved glucose tolerance (though this effect was also attenuated by metoprolol–hydrochlorothiazide treatment) and lowered triglyceride and fasting glucose levels. Changes in blood pressure from baseline did not differ significantly between the sibutramine and placebo groups or between the three antihypertensive cohorts.

Metoprolol–hydrochlorothiazide therapy attenuates both the weight-loss action of sibutramine and its beneficial effects on visceral obesity; therefore, felodipine–ramipril or slow-release verapamil–trandolapril might better support the effects of sibutramine in obese patients with hypertension.

**Original article** Scholze J *et al.* (2007) Optimal treatment of obesity-related hypertension: the hypertension-obesity-sibutramine (HOS) study. *Circulation* 115: 1991–1998

## Characteristics of pediatric Brugada syndrome

Brugada syndrome is an autosomal-dominant arrhythmogenic disorder that predisposes those affected to sudden cardiac death. There is little information about its clinical features and prognosis in the pediatric population.

Probst *et al.* collected data on 30 patients (mean age 8 ± 5 years) from 26 different families. At diagnosis, all participants displayed characteristic ‘type 1’ ST-segment elevation in leads V1–V3 during an electrocardiogram (ECG). This ECG pattern was spontaneous in 17 patients and elicited by a sodium channel blocker in 13. Mutations in the *SCN5A* gene, which encodes a cardiac sodium channel, were detected in 15 of 21 children tested.

Diagnosis of Brugada syndrome was most commonly made during family screening (*n* = 17) or following investigation of unexplained syncope (*n* = 10). Symptoms had been brought on by fever in 5 of 11 children. Treatment of one-third of patients was initiated; a cardioverter-defibrillator (ICD) was implanted in 5, and 4 received quinidine. Over a mean follow-up of 37 months, 2 appropriate ICD shocks were delivered, and 1 untreated child died suddenly during a febrile episode. These patients had experienced syncopal events (associated with fever in two individuals) and displayed a spontaneous type 1 ECG before treatment. These characteristics seem, therefore, to indicate poor prognosis. One inappropriate ICD shock was delivered, and infection necessitated ICD removal from one child. None of the four patients treated with quinidine experienced a symptomatic event during a mean of 28 months. As this intervention was well tolerated, the authors propose it as a suitable alternative to ICDs.

**Original article** Probst V *et al.* (2007) Clinical aspects and prognosis of Brugada syndrome in children. *Circulation* 115: 2042–2048

## Renal insufficiency increases long-term MI incidence and mortality after CABG surgery

Short-term studies have shown that renal insufficiency (RI) is detrimental to outcome following CABG surgery. Holzmann *et al.* have found that mild RI before CABG surgery predicts long-term