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## IN BRIEF

### HYPERTENSION

#### Benefits of renal denervation persist at 3 years—data from Symplicity HTN-1

The Symplicity HTN-1 study demonstrated that renal denervation by radiofrequency ablation significantly reduced blood pressure (BP) in patients with drug-resistant hypertension at 1 and 12 months. A new analysis in the *Lancet* shows that this benefit was sustained at 3 years after therapy. Among 88 patients for whom data were complete at 36 months, systolic BP was reduced by 32.0 mmHg (95% CI –35.7 mmHg to –28.2 mmHg), and diastolic BP by 14.4 mmHg (95% CI –16.9 mmHg to –11.9 mmHg). The investigators conclude that “renal denervation seems to offer a novel and complementary approach for patients in whom pharmacological options seem exhausted. Adequately powered clinical trials with long-term follow-up are warranted to confirm these results”.

**Original article** Krum, H. *et al.* Percutaneous renal denervation in patients with treatment-resistant hypertension: final 3-year report of the Symplicity HTN-1 study. *Lancet* doi:10.1016/S0140-6736(13)62192-3

### RISK FACTORS

#### Testosterone therapy associated with increased risk of cardiovascular events

A retrospective analysis of data from men in the US Veterans Affairs system has shown that testosterone therapy is associated with an increased risk of death, myocardial infarction, or stroke. Vigen *et al.* examined outcomes for 8,709 men with testosterone levels <300 ng/dl who underwent diagnostic coronary angiography. The rate of the composite outcome during the 3 years after angiography was higher in men who received testosterone therapy ( $n=1,223$ ) than in those who did not (25.7% vs 19.9%). In a multivariate analysis, testosterone therapy was independently associated with adverse cardiovascular outcomes (HR 1.29, 95% CI 1.04–1.58). Commenting on the study, in which she was not involved, Anne R. Cappola warns “in light of the high volume of prescriptions and aggressive marketing by testosterone manufacturers, prescribers and patients should be wary.”

**Original article** Vigen, R. *et al.* Association of testosterone therapy with mortality, myocardial infarction, and stroke in men with low testosterone levels. *JAMA* 310, 1829–1836 (2013)

### ARRHYTHMIAS

#### Sports-related sudden cardiac arrest is far less common in women than in men

A report from a 5-year national survey conducted in France reveals that the incidence of sudden cardiac arrest (SCA) related to sporting activities is 30-times lower in women than in men. The sports principally associated with SCA in women were jogging, cycling, and swimming, with moderate-to-vigorous effort. Among 820 individuals who experienced an SCA, only 5.2% were female. The overall incidence of SCA per million female sports participants aged 15–75 years was estimated to be 0.59–2.17 per year. In addition, women were significantly more likely than men to be successfully resuscitated and alive at hospital admission than men (46.6% vs 30.0%,  $P=0.02$ ). Neurological outcome and survival to hospital discharge were similar between the sexes.

**Original article** Marijon, E. *et al.* Characteristics and outcome of sudden cardiac arrest during sports in women. *Circ. Arrhythm. Electrophysiol.* doi:10.1161/CIRCEP.113.000651