

taking HRT were older, had lower BMIs, were less likely to be smokers or have diabetes, and were more likely to have a history of hypertension than women not receiving HRT. The median duration of follow-up was 10.2 years. The incidence and calculated risk of cardiovascular disease increased with baseline level of lipoprotein(a) in women who were not taking HRT, particularly in those with high LDL levels; however, this relationship was not apparent in women on HRT, even in those with elevated LDL levels.

On the basis of the results of this large study, lipoprotein(a) levels should be used as a predictor of cardiovascular disease only in women who are not taking HRT.

**Original article** Danik JS *et al.* (2008) Lipoprotein(a), hormone replacement therapy, and risk of future cardiovascular events. *J Am Coll Cardiol* 52: 124–131

### High prevalence of endomyocardial fibrosis in rural Mozambique

Endomyocardial fibrosis is a devastating disease that causes restrictive cardiomyopathy and, eventually, advanced heart failure. The etiology of endomyocardial fibrosis is poorly understood and treatment options are limited. In response to the lack of epidemiologic data from tropical areas where this disease is endemic, Mocumbi *et al.* have conducted a large-scale, community-based study of endomyocardial fibrosis in Inharrime—a rural, coastal region of Mozambique.

Random selection of villages, and households within each village, produced a study sample of 1,249 individuals, of whom 1,063 participated in the study (mean age 22.5 years, 57.5% women). Screening for endomyocardial fibrosis—using a portable, battery-operated echocardiograph—revealed endomyocardial fibrosis in 211 individuals (19.8% of the cohort), only 48 of whom (22.7%) reported symptoms. A novel 35-point scoring system classified the disease as mild in 163 people (77.3%), moderate in 39 (18.5%), and severe in 9 individuals (4.3%). Although the majority of cases were biventricular ( $n=117$ ; 55.5%), left-sided endomyocardial fibrosis was reported more often than biventricular or right-sided disease among participants >30 years of age (37.2%

versus 11.3%,  $P<0.001$ ). The prevalence of endomyocardial fibrosis was highest among patients aged 10–19 years (28.1%) and men were significantly more likely than women to be affected (23.0% versus 17.5%,  $P=0.03$ ).

The authors call for further studies in this population to elucidate the molecular mechanisms of endomyocardial fibrosis, and to help develop approaches to its prevention and treatment.

**Original article** Mocumbi AO *et al.* (2008) A population study of endomyocardial fibrosis in a rural area of Mozambique. *N Engl J Med* 359: 43–49

### Obstructive sleep apnea might trigger myocardial infarction

In the general population, sudden cardiac death occurs most frequently in the morning, between 6am and noon; by contrast, sudden cardiac death in patients with obstructive sleep apnea (OSA) usually occurs at night. Researchers have hypothesized that OSA might trigger myocardial infarction (MI), as MI can cause sudden cardiac death and patients with a history of MI are more likely to have OSA than the general population.

Kuniyoshi *et al.* prospectively studied 92 patients admitted to hospital with incident MI. Onset of MI between midnight and 6am occurred significantly more often in patients with OSA than in patients without OSA, irrespective of whether OSA was defined as  $\geq 5$  or  $\geq 10$  apnea-hypopnea events per hour (32% versus 7%,  $P=0.01$ , and 33% versus 14%,  $P=0.03$ , respectively). Patients who experienced an MI between midnight and 6am were six times more likely to have OSA than those who experienced MI at other times ( $P=0.01$ ); overall, 91% of patients who had an MI during this time period had OSA.

The authors of this study conclude that OSA might be a trigger for MI and suggest that patients with nocturnal onset of MI should be tested for this disorder. Given that the pathophysiology of OSA might increase the risk of MI at night, the potential for OSA therapy to prevent night-time cardiac events should be evaluated.

**Original article** Kuniyoshi FHS *et al.* (2008) Day night variation of acute myocardial infarction in obstructive sleep apnea. *J Am Coll Cardiol* 52: 343–346