

adverse events than continued aspirin therapy (odds ratio 3.14, 95% CI 1.75–5.61; $P=0.0001$ for effect). The risk of adverse events reached an even greater magnitude when aspirin was discontinued in patients with intracoronary stents (odds ratio 89.78, 95% CI 29.90–269.60; $P<0.00001$ for effect).

Although the findings are limited by statistical heterogeneity, the authors conclude that the discontinuation or withdrawal of aspirin markedly increases the risk of adverse events in patients with or at moderate to high risk for CAD.

Original article Biondi-Zoccai GGL *et al.* (2006) A systematic review and meta-analysis on the hazards of discontinuing or not adhering to aspirin among 50 279 patients at risk for coronary artery disease. *Eur Heart J* 27: 2667–2674

Cardiac resynchronization therapy lowers mortality in advanced heart failure

Cardiac resynchronization therapy (CRT) improves symptoms, quality of life and exercise capacity in patients with advanced heart failure; however, studies to date have been underpowered to assess the effects of CRT on mortality. This meta-analysis by Rivero-Ayerza *et al.* combines data from 2,371 patients taken from 5 studies that compared the effect on survival of CRT alone versus optimum pharmacologic therapy. The mean age of the study populations included in this meta-analysis ranged from 64 years to 68 years, and the majority of patients were male.

During the mean follow-up period of 18.4 months (range 3.0–29.4 months), patients who received CRT alone had a lower all-cause mortality than those receiving pharmacologic therapy (16.9% vs 20.7%; odds ratio [OR] 0.71, 95% CI 0.57–0.88; $P=0.002$). The observed survival benefit of CRT alone was largely attributable to a reduction in death from progressive heart failure (6.7% vs 9.7%; OR 0.62, 95% CI 0.45–0.84; $P=0.003$). This reduced progressive heart failure mortality is unsurprising as CRT directly moderates myocardial function and heart failure profile. Rates of sudden cardiac death were similar in the two groups (6.4% vs 5.9%; OR 1.04; $P=0.84$).

Despite the observed benefits of CRT, mortality remained high for patients with advanced heart failure. The authors of this study suggest

that adding a defibrillator function to a CRT device is likely to further increase survival, and that this warrants further investigation.

Original article Rivero-Ayerza M *et al.* (2006) Effects of cardiac resynchronization therapy on overall mortality and mode of death: a meta-analysis of randomized controlled trials. *Eur Heart J* 27: 2682–2688

Symptoms of undiagnosed stroke are commonplace in the general population

Undiagnosed strokes are common—using MRI, the 1998 ARIC study documented clinically silent cerebral infarctions in 11% of adults aged 55–64 years. The REGARDS study, published recently in the *Archives of Internal Medicine*, set out to further investigate the prevalence of stroke symptoms in a general US population (i.e. people who had not been diagnosed with stroke or a transient ischemic attack) and the association of these symptoms with recognized risk factors, as defined by the Framingham stroke risk score. Information was first obtained by telephone interview, with a physical examination performed 3–4 weeks later. A final cohort of 18,462 participants (mean age 65.8 years) was available for analysis.

One or more symptoms of stroke, such as sudden weakness, numbness or loss of vision, were reported by 3,292 subjects—17.8% of the group. Multivariate analysis showed that stroke symptoms were more common among African American participants than white participants, and among participants with less education, lower income and poorer self-reported general health. There was a greater prevalence of stroke symptoms among subjects with high Framingham stroke risk scores. Targeted education and attempts to ameliorate risk factors such as hypertension, atrial fibrillation and smoking should be employed as preventative measures for patients who report symptoms of stroke. Follow-up of the REGARDS cohort will reveal whether or not those who reported symptoms and sought medical attention had actually experienced a stroke.

Original article Howard VJ *et al.* (2006) High prevalence of stroke symptoms among persons without a diagnosis of stroke or transient ischemic attack in a general population: the Reasons for Geographic And Racial Differences in Stroke (REGARDS) study. *Arch Intern Med* 166: 1952–1958