Comparing outcomes from bare metal and drug-eluting coronary stents

Although drug-eluting stents reduce restenosis rates relative to bare metal stents, concerns have been raised that drug-eluting stents may also be associated with an increased risk of stent thrombosis. This study focused on the effect of stent type on population-based interventional outcomes.

The study compared the outcomes of Medicare beneficiaries who underwent non-emergent coronary stenting before and after the availability of drug-eluting stents. It was an observational study of 38 917 patients who underwent non-emergent coronary stenting between September 2002 and March 2003 when only bare metal stents were available (bare metal stent era cohort) and 28 086 similar patients who underwent coronary stenting between September and December 2003, when 61.5% of patients received a drug-eluting stent and 38.5% received a bare metal stent. Follow-up data were available until December 2005.

The widespread adoption of drug-eluting stents into routine practice was associated with a decline in the need for repeat revascularization procedures and similar 2-year risks for deaths and ST elevation myocardial infarction to those who had received bare metal stents.

Malenka D, Kaplan A, Lucas L, Sharp S, Skinner J (2008) Outcomes following coronary stenting in the era of bare-metal vs the era of drug-eluting stents. *JAMA* **299:** 2868–76

Angiotensin II blockade and aortic root dilation in Marfan's syndrome

Progressive enlargement of the aortic root, leading to dissection, is the main cause of premature death in patients with Marfan's syndrome. Recent data from mouse models of Marfan's syndrome suggest that aortic-root enlargement is caused by excessive signalling by transforming growth factor β (TGF-β) that can be mitigated by treatment with TGF-β antagonists, including angiotensin II-receptor blockers. In this study, the clinical response to angiotensin II-receptor blockers in paediatric patients with Marfan's syndrome who had severe aortic root enlargement was evaluated.

The study included 18 paediatric patients with Marfan's syndrome who had been followed during 12–47 months of therapy with angiotensin II-receptor blockers after other medical therapy had failed to prevent progressive aortic root enlargement. The angiotensin II-receptor blocker was losartan in 17 patients and irbesartan in one patient. The efficacy of angiotensin II-receptor blocker therapy was evaluated by comparing the rates of change in aortic root diameter before and after the initiation of treatment with angiotensin II-receptor blockers.

The group concluded that, in this small cohort study, the use of angiotensin II-receptor blocker therapy in patients with Marfan's syndrome significantly slowed the rate of progressive aortic root dilation, although these findings need confirmation in a randomized trial.

Brooke B, Habash J, Judge D et al (2008) Angiotensin II blockade and aortic-root dilation in Marfan's syndrome. *N Engl J Med* **358:** 2787–95

Cigarette smoking and the risk of endometrial cancer: a meta-analysis

Epidemiological findings concerning the association of endometrial cancer risk with cigarette smoking are inconsistent. In this study, the team conducted a meta-analysis of epidemiological studies to examine this relationship.

Ten prospective and 24 case-control studies were included in the analysis of the effect of 'ever smoking'. 'Ever smoking' was statistically significantly associated with a reduced risk of endometrial cancer among prospective studies and case-control studies. The inverse association was significant among current and former smokers. Six prospective and six case-control studies were included in the quantitative analysis. It was noted that an increase of smoking of 20 cigarettes per day was statistically associated with 16% and 27% reduced risks of endometrial cancer in prospective and case-control studies, respectively. In addition, it was found that cigarette smoking was significantly associated with a decreased risk of endometrial cancer among postmenopausal women, but not among premenopausal women. The risk reduction seemed to be stronger among hormone replacement therapy users than non-users.

Cigarette smoking was found to be significantly associated with a reduced risk of endometrial cancer, especially among postmenopausal women.

Zhou B, Yang L, Sun Q et al (2008) Cigarette smoking and the risk of endometrial cancer: a meta-analysis. *Am J Med* **121:** 501–8

The relationship of coffee consumption with mortality

Coffee consumption has been linked to various beneficial and detrimental health effects, but data on its relation with mortality are sparse. The objective of this study was to assess the association between coffee consumption and mortality from cardiovascular disease, cancer, and all causes during 18 years of follow-up in men and 24 years of follow-up in women.

Sex-specific Cox proportional hazard models were used to investigate the association between coffee consumption and incidence of all-cause and disease-specific mortality in a prospective cohort study. A total of 41 736 men and 86 214 women with no history of cardiovascular disease or cancer were recruited for the study.

Coffee consumption was assessed first in 1986 for men and in 1980 for women and then every 2–4 years until 2004. Investigators documented 6888 deaths (2049 as a result of cardiovascular disease and 2491 as a result of cancer) among men and 11 095 deaths (2368 as a result of cardiovascular disease and 5011 as a result of cancer) among women.

It was found that regular coffee consumption was not associated with an increased mortality rate in either men or women. The possibility of a modest benefit of coffee consumption on all-cause and cardiovascular disease mortality needs to be further investigated.

Lopez-Garcia E, van Dam R, Li T, Rodriguez-Artalejo F, Hu F (2008) The relationship of coffee consumption with mortality. *Ann Intern Med* **148:** 904–14