

Good long-term outcomes for drug-eluting stents

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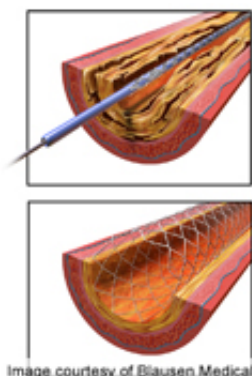


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Meta-analysis of randomized clinical trials suggests that drug-eluting stents (DESs) significantly reduce repeat revascularizations, with no increase in stent thrombosis (ST), mortality, or recurrent myocardial infarction, but data from observational studies indicate an increased risk of ST with DES use, according to research published in the April 1 issue of *The American Journal of Cardiology*.

(HealthDay) -- Meta-analysis of randomized clinical trials (RCTs) suggests that drug-eluting stents (DESs) significantly reduce repeat revascularizations, with no increase in stent thrombosis (ST), mortality, or recurrent myocardial infarction, but data from observational studies indicate an increased risk of ST with DES use, according to research published in the April 1 issue of *The American Journal of Cardiology*.

To investigate the long-term outcomes of DESs and bare metal stents (BMSs) after primary [percutaneous coronary intervention](#) (PPCI), Eric L. Wallace, D.O., of the University of Kentucky in Lexington, and associates conducted a meta-analysis of eight RCTs involving 5,797 patients and five [observational studies](#) with 4,650 patients.

In the RCTs, the researchers found that patients receiving sirolimus- or paclitaxel-eluting stents, compared with BMSs, had a significantly lower risk

of target lesion revascularization (odds ratio [OR], 0.48), target vessel revascularization (OR, 0.53), and major adverse cardiac events (OR, 0.69). ST, mortality, and recurrent [myocardial infarction](#) were not significantly different between the groups. In the observational studies, at three or more years follow-up, there was a small but significant increase in ST with DES use (OR, 1.62), with no evidence of recurrent myocardial infarction. DES use was associated with significantly reduced mortality compared with BMS use (OR, 0.65).

"This meta-analysis of RCTs examining the long-term outcomes of first-generation DESs versus BMSs in PPCI, DES use resulted in decreased repeat revascularization with no increase in ST, mortality, or recurrent myocardial infarction," the authors write. "The meta-analysis of observational studies demonstrates a small increase in the risk of ST and improved survival associated with DES use."

More information: [Abstract](#)
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