

RISK FACTORS NONCARDIAC SURGERY AND STENTS

Approximately 20% of patients who receive stents will require noncardiac surgery within 2 years of stent placement. According to investigators from a new retrospective cohort study, “stent type is not an important contributing factor to the risk of major adverse cardiac events (MACE)” after this noncardiac surgery. Moreover, in patients who undergo noncardiac surgery >6 months after receiving a stent, time from stent placement to surgery also seems to have no effect on risk of MACE.

“Current guidelines recommend delaying surgery for 1 year following drug-eluting stent (DES) [implantation] versus 6 weeks following [implantation of] a bare-metal stent,” explains Mary Hawn, one of the study investigators. However, “the data underlying the guidelines is limited and conflicting.” She and her colleagues, therefore, examined the outcomes of 28,029 patients who had undergone noncardiac surgeries within 2 years of coronary stent implantation. MACE were associated most strongly with nonelective surgical admission (adjusted odds ratio [AOR] 4.77, 95% CI 4.07–5.59), history of myocardial infarction in the 6 months before surgery (AOR 2.63, 95% CI 2.32–2.98), and a revised cardiac risk index ≥ 3 (AOR 2.13, 95% CI 1.85–2.44). Time from stent placement to surgery and stent type (DES versus bare-metal stent) were not significantly associated with MACE for surgeries performed >6 months after stent placement.

The contribution of antiplatelet therapy to the risk of MACE was then studied. No association was found between cessation of antiplatelet therapy for ≥ 5 days before surgery and MACE. Current guidelines recommend dual antiplatelet therapy for ≥ 1 year after placement of a DES, and that patients should not stop taking antiplatelet therapy if noncardiac surgeries are performed during this time period.

In surgeries performed ≤ 6 months after stent placement, potential confounding prevents direct comparisons between stent types. Hawn says she is now “performing secondary analyses to determine whether there is any risk attributable to a stent, or if most of the risk is related to the underlying cardiac disease. Future research should focus on optimal medical management of patients with coronary stents, including safe bridging therapy for antiplatelet management in the early stent period.”

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Original article Hawn, M. T. *et al.* Risk of major adverse cardiac events following noncardiac surgery in patients with coronary stents. *JAMA* 310, 1462–1472 (2013)