Drug-Eluting Stents and Noncardiac Surgery

To the Editor:

We were intrigued to read the article by Darvish-Kazem et al1 published in CHEST (December 2013) regarding guidelines for the perioperative management of patients with implanted coronary artery stents requiring noncardiac surgery. The review of the guidelines appears to have included some studies that identified an increased risk of major adverse cardiac events at the time of noncardiac surgery, but no studies reporting a decreased incidence of bleeding and stent thrombosis. The Geelong Hospital group first reported the successful use of tirofiban and heparin “bridging” therapy for patients with implanted drug-eluting stents (DESs). Since then, T1 cases of successful perioperative DES management have been described in the literature, including the tirofiban bridging therapy described by the Conroy et al2 and Savonitto et al3 groups. Including our unreported but recorded experience, >100 patients with DESs at risk of major adverse cardiac events or perioperative bleeding have successfully received tirofiban or heparin bridging therapy for urgent noncardiac surgery.

The early success of The Geelong Hospital tirofiban and heparin bridging therapy allowed one of our group to recommend this management to the Australian and New Zealand Cardiac Society Guideline Writing Committee, of which he was a member. Thus, despite the lack of uniform international guidelines on this specific topic, there is considerable documented experience in the management of these devices in Australia and Italy that has contributed to national guidelines in Australia and New Zealand. We hope that perioperative stent thrombosis may now be a diminishing problem as the risk/benefit assessment of bare-metal stents and DESs, along with the newer generations of percutaneous coronary artery stents, is reevaluated in elderly patients.

Stephen N. Bolsin, MBBS
Jessica Gillett, MBBS
Geelong, VIC, Australia

References


Response

To the Editor:

We thank Drs Bolsin and Gillett for their interest in our article. In our review of the clinical practice guidelines pertaining to perioperative antiplatelet therapy in adult patients with coronary stents, we aimed to address four major clinical questions, including the use of bridging strategies. Five guidelines provided advice regarding the perioperative use of bridging with an anticoagulant or antiplatelet agent. Of these guidelines, only the Cardiac Society of Australia and New Zealand provided a corresponding strength of recommendation and level of evidence with its advice. The society advised that patients at high risk of stent thrombosis who stop dual antiplatelet therapy should be considered for bridging with either heparin and/or glycoprotein IIb/IIIa antagonists. However, this guidance was based on low-quality evidence from case series, with a weak (Grade B) recommendation that this particular judgment may not apply to a substantial proportion of patients.© 2014 American College of Chest Physicians. See online for more details.