

Management of Antiplatelet therapy for Patients with Coronary Stents and who are to undergo noncardiac surgery.

STENT THROMBOSIS

- Acute stent thrombosis may be a catastrophic event often resulting in myocardial infarction and death.
- 3% of cases have occurred where dual antiplatelet therapy (DAP) or clopidogrel alone have been stopped

BLEEDING RISK

- If DAP is continued throughout the perioperative period there is a 50% increased risk of bleeding BUT this is unlikely to be fatal (except for neurosurgery or prostatectomy).

ASSESSING THE RISK OF ACUTE STENT OCCLUSION

Bare Metal Stents

- 10% of major adverse cardiac events (MACE) if DAP stopped within 30 days of stenting. Risk continues for at least three months post stenting.

Drug-Eluting Stents

- 6% MACE if DAP stopped within 12 months.

SPECIFIC RISK FACTORS FOR ACUTE STENT THROMBOSIS

- Long length of stented segment.
- Small diameter stents (<3 mm).
- Multiple stents.
- Age >80 years.
- Acute coronary syndrome as the indication for stenting.
- Diabetes.
- Renal impairment.
- Low ejection fraction.
- Previous stent thrombosis.

RECOMMENDATIONS

- Defer elective surgery for at least three months following bare-metal stenting and for 12 months following drug-eluting stenting.
- Continuation of antiplatelet therapy is recommended except for neurosurgery, prostatectomy, extraocular or major plastic reconstructive surgery.
- High-risk patients should have surgery at facilities capable of performing urgent percutaneous coronary intervention and should have cardiac monitoring in a high-dependency area during the perioperative period.
- In a few selected, very high-risk patients, bridging therapy with heparin/tirofiban or heparin/eptifibatid may be considered (limited evidence to support this).

SUMMARY

- The surgeon and the patient's cardiologist should discuss the risks for each patient.

GP'S ROLE

- Be sure the surgeon is aware that the patient has a coronary stent and provide the surgeon with details of the patient's cardiologist.
- Ascertain that the patient is aware of the risks involved in withholding antiplatelet therapy but that bleeding complications are increased if antiplatelet therapy is continued.
- Determine appropriate antiplatelet therapy has been restarted following surgery.

REFERENCES

Cardiac Society of Australia and New Zealand. *Guidelines for the Management of Antiplatelet Therapy in Patients with Coronary Stents Undergoing Noncardiac Surgery*.
BRIEGER, D. Managing Clopidogrel When General Surgery is Indicated. *Cardiology and General Practice*, May 2009.