Anticoagulation and endoscopic procedures

Dr Charlie Viiala, Gastroenterologist, Subiaco. Tel 9382 9426

The increasing use of anti-platelet and anticoagulant therapy in the management of cardiovascular and cerebrovascular disease has implications for patients requiring endoscopic and other invasive procedures. The risk of procedure-related bleeding needs to be balanced against the risk of exacerbating underlying vascular disease when these medications are withheld. Recent British Society of Gastroenterology guidelines offer practical assistance with decision making (summarised here). In general, aspirin can be continued for all scenarios.

Low risk endoscopic procedures

These include diagnostic gastroscopy or colonoscopy (with mucosal biopsy) or endoscopic ultrasound.

Aspirin: continue

Clopidogrel: continue

Warfarin: continue as long as INR in therapeutic range. Biopsy safe if INR ≤2.0

High risk endoscopic procedures

These include polypectomy, ERCP, endoscopic mucosal resection, stricture dilatation, PEG tube insertion, fine needle aspiration during endoscopic ultrasound and therapy for varices.

+ low risk vascular condition (aortic prosthetic valve, uncomplicated AF)

Aspirin: continue

Warfarin: cease 5 days before procedure and check INR pre-procedure. In general, warfarin can be restarted at usual dose on day of procedure.

Clopidogrel: stop 7 days before procedure. Generally can be restarted on day of or one day after the procedure

+ high risk vascular condition (mitral prosthetic valve, prosthetic valve and concurrent AF, thrombophilia syndromes)

Aspirin: continue

Warfarin: cease 5 days pre-procedure and commence low molecular weight heparin (LMWH) therapy 2 days after stopping warfarin. Omit LMWH on day of procedure. Restart warfarin on day of procedure and restart LMWH the day after procedure until satisfactory INR.

Clopidogel: consult with prescribing physician. In general terms:

- If bare metal coronary stent placed >1 mnth prior, clopidogrel could be stopped.
- If drug-eluting stent placed >12 mnth prior, clopidogrel could be stopped.
- If drug-eluting stent placed >6 mnth prior, clopidogrel could be stopped if procedure deemed essential.
- If drug eluting stent placed <6 mnth prior, defer high risk endoscopic procedures if possible.

The possible "safe" duration of clopidogrel cessation may be 5-7 days and it should be restarted after this interval, usually on the day following the procedure.

Clinical example

For colonoscopy the risk of bleeding for all outpatients is about 1/500, with virtually all cases occurring after polypectomy (very rarely from biopsy alone). Bleeding can occur up to 17 days post-procedure, by which time warfarin or clopidogrel would have been restarted. Drug cessation mainly reduces the risk of bleeding at the time of endoscopic intervention, however patients need to be made aware they remain at risk for several weeks post-procedure – a low risk often outweighed by the greater risk of exacerbation of vascular disease. Effective communication between all parties concerned and appropriate pre-procedure planning will minimise the risks.

References:

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