Perioperative Management of Patients on Antiplatelet Medication (Elective Surgery)

NHS Lanarkshire

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TARGET AUDIENCE	ANAESTHESIA & SURGERY PRE-ASSESSMENT DEPARTMENT
PATIENT GROUP	ALL PATIENTS LISTED ELECTIVELY FOR A SURGICAL PROCEDURE ON ANTIPLATELET DRUGS

Clinical Guidelines Summary

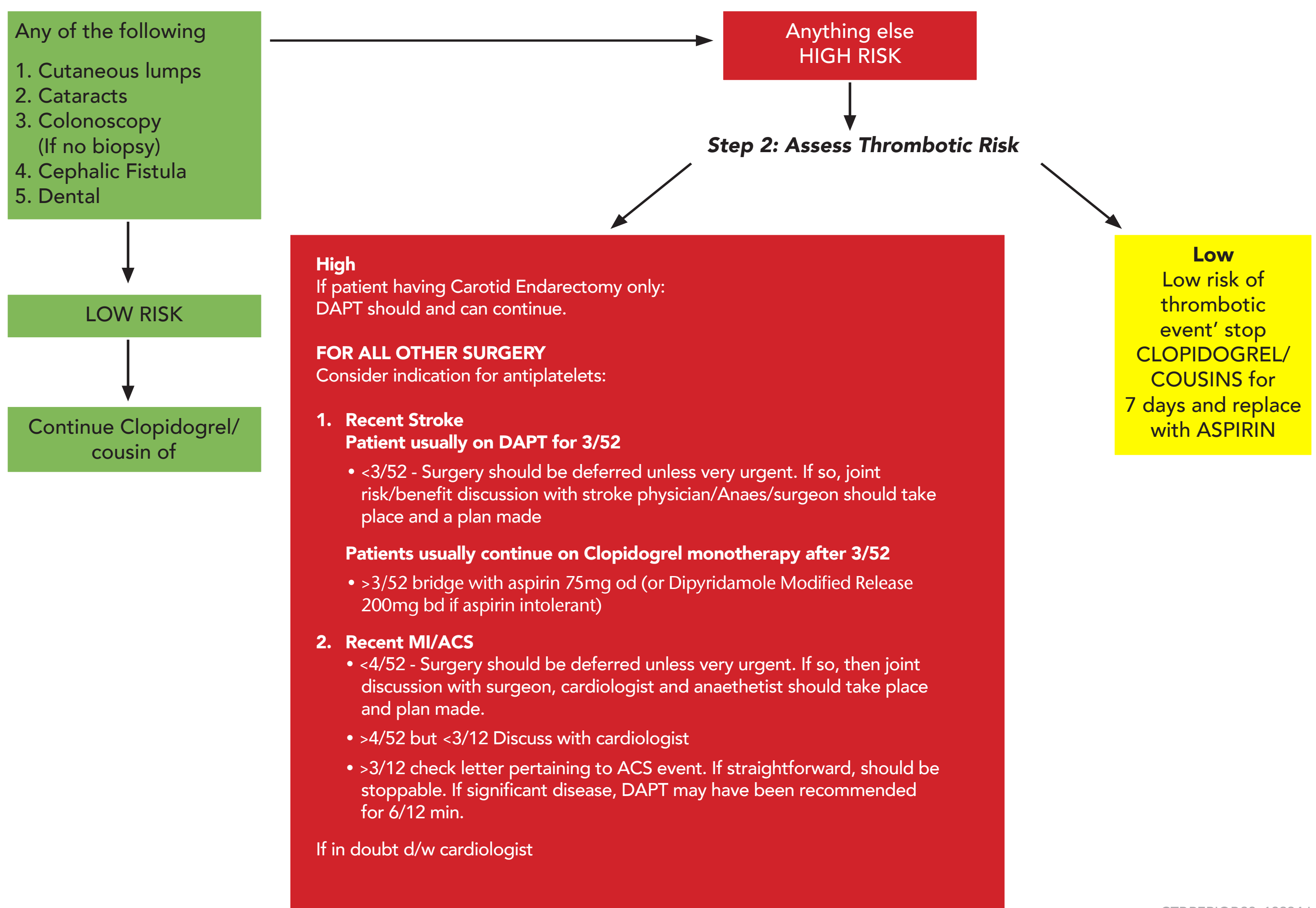
Aspirin and P2Y12 Inhibitors: Aspirin and Clopidogrel, Prasugrel or Ticagrelor

There is a risk of adverse cardiovascular events if antiplatelet agents are omitted which must be balanced with the risk of bleeding if the antiplatelet agents are continued. **Aspirin can be continued without interruption in almost all surgery except situations below.**

There are exceptions for surgery in confined spaces. These include brain and medullary canal. Note that these are not routinely performed in Lanarkshire. In prostate surgery where aspirin in dose >75mg this should be should be reduced to 75mg.

With clopidogrel, prasugrel or ticagrelor ('cousins' of Clopidogrel) there is a risk of spinal or epidural haematoma if continued prior to neuraxial anaesthesia (spinal or epidural). Aspirin is considered safe as monotherapy in neuraxial techniques.

Perioperative advice for P2Y12 Inhibitors: Clopidogrel and cousins/(Prasugrel/Ticagrelor):



Antiplatelet agent	When to stop Advice for surgery
Aspirin	Can continue – see above for exceptions
Clopidogrel	7 days - if flow chart in agreement
Prasugrel	7 days - if flow chart in agreement
Ticagrelor	5 days - if flow chart in agreement

Glycoprotein IIB/IIIA inhibitors

In general, the cardiac surgical and interventional radiology literature recommend that elective surgery should be delayed in these patients. Discuss with Cardiology/Vascular surgeon/Cardiac surgeon who started agent

GP IIb/IIIa antagonists are contraindicated within 4 weeks of surgery, should one be administered in the postoperative period (after a neuraxial technique), it is recommended that the patient be carefully monitored neurologically.

Delay emergency surgery if possible, check platelet and coagulation status pre theatre

Glycoprotein IIB/IIA Inhibitor	Advice for Surgery
Abiciximab	Delay for 48 hours after administration. Within 12 hours of administration would likely require platelet transfusion
Eptifibatide	Delay for 8 hours after administration
Tirofiban	Delay for 8 hours after administration

Adenosine reuptake inhibitors, Platelet reducing agents and Phosphodiesterease Inhibitors

Agent	Advice for Surgery
Dipyridamole	Can continue Except in some spinal, ophthalmology and neurosurgical procedures stop day before
Anagrelide	Discuss with haematologist – platelet count should increase within 4 days of stopping
Cilostazol	Stop for 7 days

RESTARTING ANTIPLATELETS

In most cases the antiplatelet medication should be restarted the morning after surgery unless there are ongoing bleeding concerns. In this case the surgeons will direct the drug to be withheld.

References

1. 2022 ESC Guidelines on cardiovascular assessment and management of patients undergoing non-cardiac surgery. European Heart Journal (2022) 43, 3826–3924 https://doi.org/10.1093/eurheartj/ehac270
2. Perioperative management of antithrombotic therapy: Antithrombotic Therapy and Prevention of Thrombosis: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines, 9th Edition
3. Regional Anaesthesia in the Patient Receiving Antithrombotic or Thrombolytic Therapy: American Society of Regional Anaesthesia and Pain Medicine Evidence-Based Guidelines, 4th Edition
4. Peri-operative management of anticoagulation and antiplatelet therapy. David Keeling, R. Campbell Tait and Henry Watson on behalf of the British Committee for Standards in Haematology 2016
5. UK Clinical Pharmacy Association, Perioperative medicine Handbook, Dual Antiplatelet therapy, 2022

Appendices

1. Governance information for Guidance document

Lead Author(s):	Dr Susanne Farrell
Endorsing Body:	Pre Assessment Group
Version Number:	2
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Responsible Person (if different from lead author)	

CONSULTATION AND DISTRIBUTION RECORD	
Contributing Author / Authors	Dr Hamish McKay Dr Brian O'Rourke Prof Mark Barber Dr Mehrdad Malekian
Consultation Process / Stakeholders: Stakeholders:	Pre Assessment Governance group
Distribution	Pre Assessment Departments at all acute sites

CHANGE RECORD			
Date	**Lead Author**	**Change**	**Version No**
		e.g. Review, revise and update of policy in line with contemporary professional structures and practice	**1**
			2
			3
			4
			5

2. **You can include additional appendices with complimentary information that doesn't fit into the main text of your guideline, but is crucial and supports its understanding.**

   e.g. supporting documents for implementation of guideline, patient information, specific monitoring requirements for secondary and primary care clinicians, dosing regimen/ considerations according to weight and/or creatinine clearance.