

Ophthalmology Antithrombotic Management Protocol

Due to the large variability in bleeding risk with different ophthalmology procedures, the following should be used to guide for management of antiplatelet and anticoagulant therapy in such patients. Whenever in doubt, discuss plans directly with the surgeon.

For all non-low bleeding risk patients who have high thrombotic risk or high CV risk, antiplatelet and anticoagulation plans should be discussed directly with the surgeon.

| | LOW BLEEDING RISK | INTERMEDIATE BLEEDING RISK | HIGH BLEEDING RISK |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | PROCEDURES | PROCEDURES | PROCEDURES |
| Procedures | Phacoemulsification (PHACO) + intraocular lens (IOL) implantation (i.e. cataract removal) Descemet's stripping automated or membrane endothelial keratoplasty (DSAEK or DMEK) Diode cyclophotocoagulation (CPC) Ahmed/Baerveldt shunts Trabeculectomy/-otomy ExPress/CyPass/iStent implants Bleb resection/revision Vitrectomy (except for PDR, submacular hemorrhage, CNVM) Radioactive plaque placement Retinopexy Cryopexy Retisert placement IOL exchange/repositioning | Blepharoplasty/browplasty Ectropion/entropion repair Ptosis repair Penetrating keratoplasty (PK) Scleral buckle Vitrectomy for proliferative diabetic retinopathy (PDR), submacular hemorrhage, choroidal neovascular membranes (CNVM) Strabismus correction (extraocular muscle alteration) | Orbitotomy Post-Mohs reconstruction Dacryocystorhinostomy (DCR) |
| Antiplatelets | Continue all uninterrupted unless aspirin for primary prophylaxis | Only continue aspirin 81 mg & only if high CV risk (eg, previous PCI) | Only continue aspirin 81 mg & only if high CV risk (eg, previous PCI) |
| Warfarin | Continue uninterrupted | If thrombotic risk is NOT HIGH (see below): Take last dose 6 days before surgery & resume on the evening of POD#0 Check INR on AM of procedure If INR >1.5, surgeon may elect to delay case If thrombotic risk HIGH (see below) but not a mechanical valve patient: No bridging anticoagulation Take last dose 3 days before surgery & resume the evening of POD#0 Check INR on AM of procedure If INR >2.5, surgeon may elect to delay case If thrombotic risk HIGH (see below) and a mechanical valve patient, pursue bridging anticoagulation per instructions for HIGH BLEEDING RISK procedures. | If thrombotic risk is NOT HIGH (see below): Take last dose 6 days before surgery & resume on the evening of POD#0 If thrombotic risk HIGH (see below): Bridging anticoagulation recommended. Discuss with surgeon & follow instructions below for LMWH Check INR on AM of procedure If INR >1.5, surgeon may elect to delay case |
| LMWH | Continue uninterrupted | Take last dose on AM of day before surgery (no later than 5 AM) Resume 48 hrs after surgery | Take last dose on AM of day before surgery (no later than 5 AM) Resume 72 hours after surgery |
| Dabigatran | Continue uninterrupted | Take last dose 2 days before surgery (3 days if GFR 30-50, 4 days if GFR<30) Resume 48 hrs after surgery | Take last dose 3 days before surgery (4 days if GFR 30-50, 6 days if GFR<30) Resume 72 hrs after surgery |
| Rivaroxaban Apixaban Edoxaban | Continue uninterrupted | Take last dose 2 days before surgery Resume 48 hrs after surgery | Take last dose 3 days before surgery Resume 72 hrs after surgery |

HIGH THROMBOTIC RISK

- Mechanical mitral valve
- Tilting disc mechanical aortic valve
- Bileaflet mechanical aortic valve + AFib, prior arterial thromboembolism (ATE; i.e., CVA), LV systolic dysfunction, or hypercoagulable condition
- Venous Thromboembolism (VTE) in last 3 months
- Intracardiac thrombus
- AFib + rheumatic valvular disease, prior ATE, or CHADS₂-VASc >6 and no bleeding risk factors (major bleed in last 3 months, platelet dysfunction [including antiplatelets], supratherapeutic INR, bleeding with prior bridging/surgery)

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Approvals:

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