Guideline for patients undergoing spinal injections who are on anticoagulants

Table 1

The classification of various pain procedures according to risk if performed in patients taking anticoagulants, as declared by the American Society for Regional Anaesthesia

Classification	Pain procedure
High risk	Spinal cord stimulation, intrathecal catheter, vertebral augmentation, epiduroscopy
Intermediate risk	Epidural injections, transforaminal injections, medial branch blocks, radiofrequency neurotomy, paravertebral blocks, sacroiliac joint block, sympathetic blocks, peripheral nerve stimulation
Low risk	Peripheral nerve blocks, peripheral joint injections, trigger point injections.

Guideline for antithrombotic medication management and spinal procedures (risk stratification described in table 1.

Medications	Time to wait from last dose for Low risk procedures	Time to wait from last dose for Intermediate risk procedures	Time to wait from last dose for High risk procedures	Time to restart the medications
NSAIDs	May continue^*	May continue^*	May continue^*	12 - 24hrs
Naproxen	May continue^*	May continue^*	May continue^*	12 - 24hrs
Aspirin	May continue^*	May continue^*	May continue^*	24hrs
Dipyridamole	May continue^*	24hrs^*	2 days	12hrs
Clopidogrel	May continue^*	7 days*	7 days	24hrs
Ticagrelor	May continue^*	5 days	5 days	24hrs
Prasugrel	May continue^*	7 days	7 days	24hrs
Warfarin	May continue^*	5 days & INR ≤ 1.5†	5 days & INR ≤ 1.5†	24hrs
Dabigatran	May continue^*	2 days if CrCl > 80 3 days if CrCl 50-80 4 days if CrCl 30-50	2 days if CrCl > 80 3 days if CrCl 50-80 4 days if CrCl 30-50	48hrs
Apixaban	May continue^*	2 days 3 days if CrCl < 30	2 days 3 days if CrCl < 30	12 - 24hrs
Rivoroxaban	May continue^*	2 days 3 days if CrCl < 30	2 days 3 days if CrCl < 30	12 - 24hrs
Heparin – IV	May continue^*	6hrs	6hrs	12hrs
LMWH - prophyl	May continue^*	12hrs	12hrs	12hrs
LMWH - therapeu	May continue^*	24hrs	24hrs	24hrs

^Caution with concomitant use of NSAIDs and other anti-thrombotic agents

*Shared assessment and risk stratification

†Discuss with surgeon if bridging therapy required

Bridging therapy for adult patients, receiving warfarin therapy

FOR PATIENTS ON WARFARIN ONLY	
Warfarin for Mechanical Heart Valves:	Most patients will require 'bridging therapy with unfractionated heparin if not, LMWH *see guide* & discuss with cardiothoracic team.
Warfarin for AF:	Consider bridging with treatment dose LMWH if the patient has the following clinical features: A. Stroke/TIA during the last 12 weeks **or** B. Previous stroke/TIA **and 3 or more** of the following: - Congestive cardiac failure - BP≥140/90mmHg or on anti-hypertensives - age >75 years - Diabetes Mellitus
Warfarin for VTE:	Consider bridging with treatment dose LMWH if: A. The acute VTE was less than 12 weeks ago B. The patient has a target INR 3.5 (history of venous thrombosis whilst anticoagulated)

CHADS2 score – To estimate the risk of thromboembolism

Score	CHADS2 Risk Criteria
1 point	Congestive heart failure
1 point	Hypertension
1 point	Age 75 years or older
1 point	Diabetes mellitus
2 points	Stroke/transient ischemic attack

CHADS2 score of 5 or 6 – high risk of thromboembolism: consider bridging therapy

CHADS2 score of 3 or 4 – moderate risk

CHADS2 score of 0 to 2 – low risk

In case of recent placement of coronary stents: It's best to defer the procedure for six weeks after placement of bare metal coronary stents and six months after drug eluting stents. Do not discontinue Clopidogrel and/or aspirin without consulting a Cardiologist.

After acute coronary syndrome: if the procedure is needed in the first 12 months please discuss with consultant cardiologist, do not discontinue Clopidogrel.