

## Endoscopy Anticoagulation - Summary Clinical Guideline

Reference no.: CG-T/2014/206

### Guidelines for the Management of Anticoagulation and Antiplatelet Therapy Including Clopidogrel, Warfarin and DOACs in Patients Undergoing Endoscopic Procedures

- For patients on prophylactic enoxaparin (fixed low dose - 20/40mg od), aspirin, NSAIDs or dipyridamole, all endoscopic procedures except ampullectomy may be performed in the absence of a pre-existing bleeding disorder
- Prophylactic enoxaparin **should not** be omitted the night before a procedure
- For patients on therapeutic enoxaparin who are having a **‘low risk’ procedure**, enoxaparin **should not** be omitted
- For patients on therapeutic enoxaparin who are having a **‘high risk’ procedure**, the last dose should be given **>24 hours** prior to their procedure
- For all other anticoagulants and antiplatelets, please refer to the following flow charts
- Where anticoagulant or antiplatelet drugs have been omitted for GI endoscopic procedures, they should be restarted according to the flow charts below unless advised alternatively by the endoscopist.
- Warfarin may be continued prior to banding of oesophageal varices on the specialist recommendation of a hepatologist
- In patients on warfarin, low risk procedures can be undertaken with an INR up to 4

<b>LOW RISK PROCEDURE</b>	
<ul style="list-style-type: none"> <li>• Diagnostic procedures +/- biopsy (including Barrett’s surveillance)</li> <li>• Biliary or pancreatic stenting</li> <li>• Diagnostic EUS</li> <li>• Oesophageal, enteral or colonic stenting</li> <li>• Device-assisted enteroscopy without polypectomy</li> </ul>	<ul style="list-style-type: none"> <li>• Botox injection</li> <li>• PEG removal</li> </ul>
Clopidogrel/Prasugrel/Ticagrelor	Continue therapy
Rivaroxaban/Apixaban/Edoxaban/Dabigatran	Omit on morning of procedure
Warfarin - continue and check INR during week before procedure	If within therapeutic range, continue usual daily dose If above therapeutic range but <5, reduce daily dose until INR returns to therapeutic range
Therapeutic enoxaparin	Continue therapy

**HIGH RISK PROCEDURE**

- Polypectomy
- EMR/ESD
- Therapy of varices or haemorrhoids
- EUS with sampling or intervention
- ERCP with sphincterotomy
- Dilatation of strictures
- PEG insertion
- APC - unless emergency

**CLOPIDOGREL / PRASUGREL / TICAGRELOR**

Low risk condition

- Ischaemic heart disease without stent
- Cerebrovascular disease
- Peripheral vascular disease

High risk condition

- Coronary artery stents

Consider cold snare polypectomy <1cm on clopidogrel monotherapy  
Stop 7 days before endoscopy  
Continue aspirin if already prescribed  
Restart 2 days after procedure

Discuss with consultant interventional cardiologist and Consider stopping 7 days before endoscopy if

- 6-12 months after drug eluting stent insertion
- <1 month of bare metal stent insertion

Continue aspirin

**WARFARIN**

Low risk condition

- Xenograft heart valve
- AF without high risk factors
- >3 months after VTE

High risk condition

- Metal valve in mitral or aortic position
- Prosthetic heart valve and AF
- AF and mitral stenosis
- AF and stroke/TIA within 3 months
- AF with previous stroke/TIA and more than 3 of CCF, hypertension, age >75, diabetes

Stop 5 days before endoscopy  
Check INR prior to procedure to ensure <1.5  
Restart warfarin evening of procedure with usual daily dose  
Check INR 1 week later to ensure adequate anticoagulation

Stop warfarin for 5 days before endoscopy  
Start LMWH 2 days after stopping warfarin  
Omit LMWH on day of procedure  
Restart warfarin on day of procedure with usual daily dose  
Continue LMWH until INR within target range

**RIVAROXABAN / APIXABAN / EDOXABAN / DABIGATRAN**

Take last dose of drug 3 days before endoscopy  
For dabigatran with eGFR30-50, take last dose 5 days before procedure. If rapidly deteriorating renal function, consult haematologist  
Restart DOACs 3 days after procedure

**THERAPEUTIC ENOXAPARIN**

Give last dose >24 hours prior to procedure