NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Venous Thromboembolism (VTE) in Lower Limb Injury, Risk Assessment

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Does this version include changes to clinical advice:	N/A
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Approval Group:	Medicines Utilisation Subcommittee of ADTC

Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

NHSGGC Risk Assessment for Venous Thromboembolism (VTE) in lower limb immobilisation - V7.0	NHS Greater Glasgow and Clyde

This document has been approved for use by Emergency Department (ED) and Orthopaedic teams working in EDs and Minor Injury Units(MIUs) across NHSGGC. **This document should be used for all patients discharged from EDs or MIUs with non-weight bearing Lower Limb IMMOBILISATION and Orthopaedic follow-up. (NB Use Equinus Cast for suspected Achilles Rupture)**	*Addressograph label*

Step 1: VTE Risk Assessment for consideration of thromboprophylaxis

No	Yes	Immobilisation Risk Factor
•	•	Back-slab or Equinus cast **non-weightbearing** (not walking boot)

VTE Risk-factor (if **any are** present proceed to assess Bleeding Risk Factors):

No	Yes	VTE Risk Factor
•	•	Achilles tendon rupture (any management option)
•	•	Obesity (BMI>30Kg/m^2)
•	•	Active cancer or cancer treatment
•	•	Thrombophilia
•	•	Personal history or first degree relative with a history of VTE
•	•	Pregnancy or <6 weeks post-partum
•	•	Hormone replacement therapy or tamoxifen
•	•	Contraceptive pill (oestrogen containing)

Does the patient have any bleeding risk factors?

No	Yes	Bleeding Risk Factor
•	•	Concurrent use of therapeutic anticoagulant i.e. warfarin, DOAC (not including aspirin, clopidogrel)
•	•	Inherited or acquired bleeding disorder (e.g. haemophilia, Von Willebrands, liver failure)
•	•	Systolic BP ≥230 / diastolic BP ≥120 mmHg
•	•	Liver disease with coagulopathy

VTE Prophylaxis not required	No Bleeding Risks	Increased bleeding risk
	Prescribe thromboprophylaxis for increased risk as overleaf	Discuss with senior clinical staff before prescribing thromboprophylaxis do not continue with Step 2 or 3.

Step 2: ED Management Plan (Tick all that apply)

Thromboprophylaxis Not Required	*TIME*	*SIGN*
Thromboprophylaxis to be Prescribed		
Assess baseline coagulation and renal function – Send Full Blood Count/Coagulation Screen/Urea & Electrolytes	• YES	*SIGN*
For Rivaroxaban (Off label use): (Preferred choice see Step 3) Explain to patient 10 days Rivaroxaban will be supplied by ED/MIU. Provide a Rivaroxaban Patient Information Leaflet and a DOAC Patient Booklet stressing the information on side effects. Rivaroxaban will be continued by Orthopaedic Clinic if appropriate.	• YES	• NO
For Enoxaparin: (Choose if Rivaroxaban excluded see Step 3) For MIU patients, prescription and administration of the first dose of Enoxaparin will require transfer to ED. Further daily dose in ED may be required depending on weekend availability of local DVT service. Thereafter DVT service to deliver 1 week SC enoxaparin and provide a sharps bin and information leaflets. Enoxaparin will be continued by Orthopaedic Clinic if appropriate.	• YES	• NO
VTE awareness & prevention leaflet supplied	• YES	• NO

Step 3: Drug Choice, Dosing and Exclusions (Tick all that apply)

(Prescribe on ED/MIU Card or Out Patient Prescription for Pharmacy)

Drug	Dose	Tick
Rivaroxaban: use as preferred choice *Continue until cast removed/changed to functional brace and weight bearing* Exclusions to use of rivaroxaban: • Pregnant or breastfeeding women. • Active bleeding, or inherited or acquired bleeding disorder. • Liver disease associated with cirrhosis and/or coagulopathy • Lesion or condition considered to be at significant risk of major bleeding (e.g. malignant neoplasms at high risk of bleeding, recent brain or spinal surgery, recent intracranial haemorrhage, oesophageal varices). • Systolic BP >230mmHg. Diastolic BP >120mmHg. • Rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption. • Concurrent use of the following medications: ○ Anticoagulants. ○ Triazole and imidazole antifungals (except fluconazole). ○ Protease inhibitors. ○ Strong CYP3A4 inducers e.g. Rifampicin, Phenytoin, Carbamazepine, Phenobarbital and St John'sWort. ○ Dronedarone. • Rivaroxaban should be avoided if CrCl is <15ml/min. Caution should be exercised if CrCl 15 to 29. • Known Antiphospholipid Syndrome.	**10mg** once daily	•

Drug	Dose		Tick
Enoxaparin: use if Rivaroxaban contraindicated *Continue until cast removed or changed to functional brace and weight bearing.*	Standard dosing	40mg once daily	•
	Reduced dosing if CrCl <30 or Weight <50Kg	20mg once daily	•
	Increased dosing if Weight>120Kg	40mg twice daily	•
	If CrCl <15 use Dalteparin	2500U once daily	•

Assessor's Name	*Assessor's Signature*	*Date*