Title	VTE Prophylaxis with Apixaban – Orthopaedics Limb cast/brace
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NHS Borders

VENOUS THROMBOEMBOLISM (VTE) PROPHYLAXIS with APIXABAN FOR ORTHOPAEDIC CASES TREATED WITH LOWER LIMB CAST/BRACE. Adults over age of 16.

Prolonged Lower limb immobilisation is a risk factor for DVT.
Other Risk factors for DVT and Bleeding risk need to be assessed to determine if a patient is likely to benefit from anti-coagulation.

Step 1 – Confirm patient should be considered for anticoagulation (if yes for any proceed to step 2)

Lower Limb Cast for discharge and not for impending operation	**YES/NO**
Moon Boot with advice to keep on for over one week (if moonboot used intermittently- as required for pain, taken off at rest & at night – anticoagulation is not indicated)	**YES/NO**
Knee splints or cylinder casts – for patellar fractures/knee effusions – if non weight bearing	**YES/NO**

Step 2 – Any risk for bleeding (if yes for any, not for anti coagulation)

Currently on Aspirin/Clopidogrel/Warfarin/NOAC/ dipyridamole	**YES/NO**
Presence of Active Bleeding – remember active ulcer disease	**YES/NO**
Risk of Thrombocytopenia (platelets <100x10 ^{9}/l) bloods in last 3/12	**YES/NO**
Risk of eGFR <30ml/min (bloods last 3/12 if on meds which can affect renal function)	**YES/NO**
Haemophilia or known haemorrhagic disorder	**YES/NO**
CNS haemorrhage ever or CVA in past month	**YES/NO**
Falls risk outweighs benefit in opinion of clinician	**YES/NO**

Step 3 – additive risk factors – score of 3 or above, with no risks advise prophalyxis

Risk Factors for DVT/PE	**Points**
Age over 60	**1**
Personal HX of DVT/PE or known thrombophillia	**3**
Obesity (BMI over 30) – refer attached chart	**2**
Cancer ongoing or Chemo in past 6 months	**2**
Extensive Varicosities	**1**
Any significant medical co morbidity –COPD/Heart Failure/Renal Failure/IBD	**1**
Current Smoker	**1**
First degree relative of DVT/PE	**1**
Pregnant or 6 weeks post partum – discuss with Obs & Gynae (apixaban contraindicated in pregnancy ; LWMH may be appropriate)	**2**
On Combined Contraceptive pill/Tamoxifen/Raloxifene/HRT	**1**
Recent hospital admission/major surgery past 6 weeks	**1**
Total Score	

- **<u>If Scoring 3 or more</u> and Step 2 all negative prescribe apixaban 2.5mg twice daily for 2 weeks, give patient advice leaflet and advise patient to start treatment in 24 hours. Patients reassessed as out patients within 2 weeks and are reassessed for further anticoagulation.**
- Consider
  - Low or high risk?
  - Freely mobile?
  - Weight bearing?

  If a further supply of apixaban is indicated, continuing script should be issued from fracture clinic
- If any concerns or possibility of impending operation please speak to senior doctor.
- If admitted as an inpatient, decision for anticoagulation is made on the ward. If pregnant or breast feeding please discuss with obstetrics.

Clinical Information re DVT prophylaxis

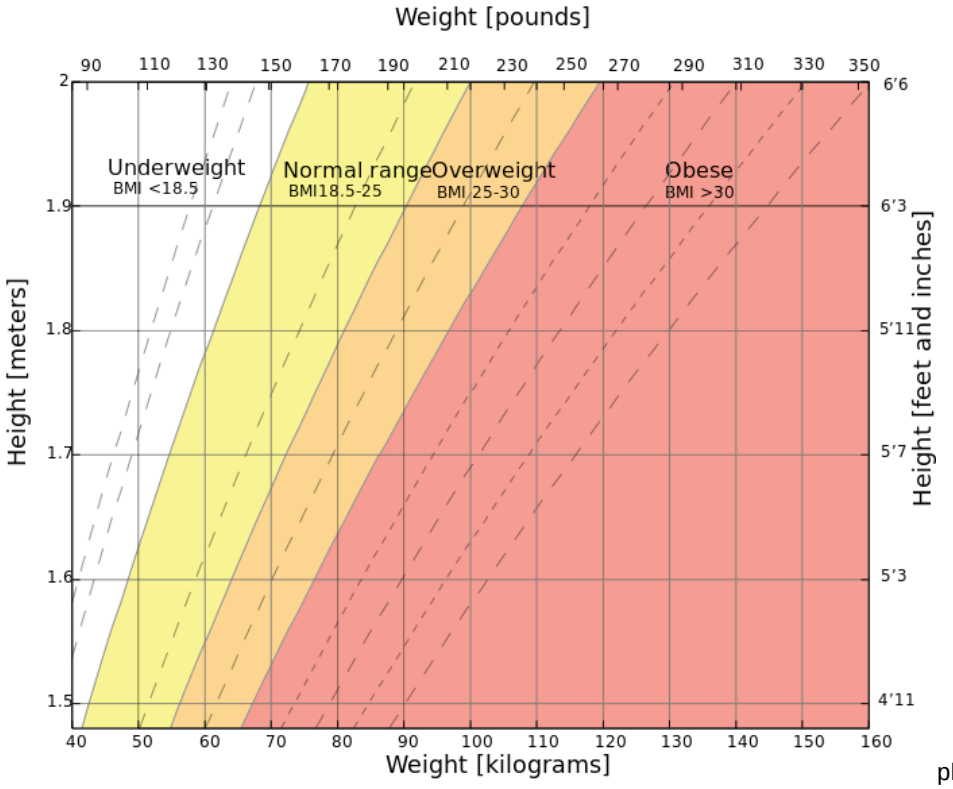
'The relationship between limb immobilisation and VTE has been documented since 1944. The incidence of VTE associated with immobilisation is estimated between 5-39% (annual undifferentiated population 0.12-0.18%). Many of these venous thrombosis will be very distal and equipoise remains on need for active treatment' (Royal College of Emergency Medicine – Guideline for use of thromboprophylaxis in ambulatory trauma patients requiring temporary limb immobilisation).

Patients scoring 3 or more on the thrombosis risk assessment, and particularly those with personal history of DVT/PE or a known thrombophilia should be considered for APIXABAN as thromboprophylaxis. This should start 24 hours after the plaster cast/brace has been applied (once the fracture is not at risk of bleeding) and continued for 2 weeks after plaster cast/brace has been removed, depending how quickly mobility is recovered.

Apixaban interacts with azole anti-fungal drugs, strong inducers of CYP3A4, P-gp and HIV protease inhibitors; and should not be used in patients prescribed **rifampicin, carbamazepine, st John's wort, phenobarbitol** . Refer to BNF & product information for further information (LMWH prophylaxis may be an appropriate alternative)

Apixaban is an oral direct factor Xa inhibitor which is licensed for thromboprophylaxis in orthopaedics post hip and knee surgery and is an oral alternative to LMWH for high risk patients requiring thromboprophylaxis while immobilised in plaster casts post orthopaedic trauma. It is widely used for thromboprophylaxis in AF and is usually well tolerated; major side effects include bleeding and allergic reactions. **Use of apixaban for VTE prophylaxis in orthopaedic patients treated with lower limb cast/brace is "unlicensed** ", but has been approved for use in NHS Borders

- The recommended dose is 2.5 mg bd.
- No monitoring is needed (renal function should be checked, as clinically appropriate, in reduced renal function).
- Do not use in significant renal impairment (creatinine clearance < 30ml/min).
- Cautious use in body weight < 60kg and age > 80 years (the risk of bleeding is greater and the risk of bleeding v thrombosis needs to be carefully assessed in this patient group)
- Apixaban should NOT be used in pregnancy or when breast feeding (LMWH is safe)
- If surgery is planned apixaban must be discontinued for at least 24 hours



please note 14pounds in a stone)

NHS Borders anticoagulant committee. June 2017 (Updated from previous Jan 2016 document. For review June 2020.

DVT Prophylaxis for discharged patients with Lower Limb Splints and Casts
(Patient Information Leaflet)

Being immobilised in a Cast or Moon Boot increases the risk of developing a Deep Vein Thrombosis (blood Clot in the Leg)

The level of risk for developing this complication is dependent on the type of immobilisation, the likely duration of immobilisation, and an individual's base line risk factors.

Medication (anti-coagulants) can reduce the chance of developing a blood clot but this medication comes with a slight risk of bleeding complications. Again the risk of bleeding complications will be influenced by an individual's age, mobility, medication and past medical history.

An assessment of your risk of clot and your risk of benefit from using anti coagulant medication suggests that you would benefit from treatment.

We would advise you to take 2.5mg of apixaban twice a day. You should start in 24 hours time (this allows any bleeding associated with injury to settle and allows the Orthopaedic team to review your x-rays to ensure that they agree that you need to be immobilised and do not need an operation – if they do they will be in touch with you after the Virtual Fracture Clinic). If you have undergone surgery, apixaban is started the morning after surgery.

You will be given a pack to cover you for the first 2 weeks (28 tablets) treatment in A&E.The duration of the treatment will depend on the duration of the immobilisation, which will be determined at the fracture clinic review. If a further supply of apixaban is required, this will be prescribed at the clinic.

Refer to the manufacturer's Patient Information Leaflet also included in this pack.

June 2022