Possible lower limb DVT

AMBULATORY CARE PLAN

NHS Lothian

ASSESSMENT of POSSIBLE LOWER LIMB DVT in PATIENTS WHO PRESENT to HOSPITAL

Patient presents with possible DVT.
Refer all pregnant patients to obstetric triage.

Obvious alternative diagnosis

Yes → DVT unlikely.
Treat appropriately.

No

Well's score.
Blood for FBC, U&E, glucose, LFTS, d-dimer, coagulation, calcium.
Complete full history and examination.
Assess for any underlying condition including malignancy that may have led to DVT.
Clarify if there is a family history of VTE.
Assess bleeding risk and suitability for anti-coagulation.

Well's score 1 or less

Check d-dimer

Positive →

Negative

Well's score 2 or more

Ultrasound leg
Include Well's score, history of previous DVT and, if appropriate, d-dimer result on the request. Please also include relevant risk factors and history and examination findings that point to a diagnosis of DVT.
If any delay over 4 hours to get imaging start anticoagulation with Apixaban 10mg twice daily or therapeutic Dalteparin 200 IU/Kg as per BNF (for body weight >120Kg discuss with senior doctor as off label dosing and LMWH monitoring may be required).
Check contraindications and use patient counselling sheets for both.

Ultrasound negative or inconclusive
(See footnote below**)**

Arrange for review appointment at 5-7 days. Advise to return immediately if symptoms worsen or develops haemoptysis, pleuritic chest pain or SOB and supply advice leaflet.

DVT unlikely.
Consider alternative diagnosis and discharge.
Put low probability of DVT on discharge letter.
Advise that although low probability there is a <1% chance of DVT being identified within the next 3 months.
Advise to return if symptoms worse or do not settle and supply advice leaflet.
Patients should be reassessed from the beginning if they re-attend.

Ultrasound Negative ←

5-7 day review appointment.

Review patient and consider repeat ultrasound if :
- Wells score 2 or more
- Raised d-dimer
- Persisting clinical suspicion

Ultrasound positive at any stage.
Proceed to DVT management algorithm

Well's score	**Not applicable to** • DVT in sites other than the legs • Hospitalised patients • Pregnant patients

Clinical characteristic	Score
Active cancer (treatment ongoing, within previous 6 months or palliative).	1
Paralysis, paresis or recent plaster immobilisation of the lower extremities	1
Recently bedridden >/= 3 days or major surgery within previous 12 weeks requiring general or regional anaesthesia	1
Localised tenderness along the distribution of the deep venous system	1
Entire leg swollen	1
Calf swelling > 3cm compared to other calf (measure 10cm below tibial tuberosity)	1
Pitting oedema confined to the symptomatic leg	1
Collateral superficial veins (non-varicose)	1
Previously documented deep vein thrombosis or pulmonary embolus	1
Alternative diagnosis at least as likely as deep vein thrombosis	-2
Total Score:	

****IN CASES OF ONGOING CLINICAL CONCERN OF DVT DESPITE INVESTIGATION DO NOT DISCHARGE.****
CHECK WITH A SENIOR DOCTOR. CASE MAY MERIT FURTHER DISCUSSION WITH RADIOLOGY AND HAEMATOLOGY TO DECIDE ON FURTHER IMAGING AND/OR TREATMENT.

Authors: Ross Murphy, Rachel Sutherland, Andrew Stevenson, Ali Harmouche, Fiona McGrehan March 2023
Review date: March 2026

Possible lower limb DVT

AMBULATORY CARE PLAN

NHS Lothian

MANAGEMENT of CONFIRMED DVT

All patients

- Ensure all patents have had baseline blood tests including FBC, U+E, glucose, calcium, LFTs, coagulation, urinalysis and chest x-ray
- Check pregnancy test in all women of child bearing age and refer to Obstetric team if positive
- Ensure all females have had a cervical screening if appropriate and do a breast exam.
- Consider further imaging to look for underlying pathology depending on clinical suspicion and discuss this with radiology prior to making the request.
- Do not routinely prescribe TED stockings unless for symptom control on follow up. Refer to NHS Lothian Antithrombotic Guideline for contra-indications.
- Ensure patient given advice on exercises and elevation. (Gentle walking for 6 weeks, leg elevated when resting)
- Give patient DVT information booklet and advise to seek medical attention if symptoms of PE or worsening leg symptoms

Decide if patient requires admission

- Social circumstances or co- morbid illness necessitating admission
- Severe pain, swelling and discolouration of the leg suggestive of phlegmasia cerulea dolens. Discuss such cases with Haematology and Vascular Surgery regarding further intervention.
- Increased risk of bleeding necessitating IV heparin therapy and monitoring
- Creatinine clearance <30 mls/min (Use NHSL creatinine clearance calculator available on the intranet) - Need discussion with senior doctor to decide if for admission to hospital or ongoing management in ambulatory care and if for IV heparin or Dalteparin with LMWH levels or Apixaban.

Admit → Admit for anticoagulation and other treatment as appropriate

Ambulate

Does patient have active cancer?

Yes → **Refer to the Edinburgh Cancer Centre Antithrombotic Guideline on the Oncology Online Quality System intranet site to decide on anticoagulation.**

No

Does patient have?

- Active alcohol or drug abuse
- Significant falls risk

Yes →

LMW Heparin therapy

- Patient treated with daily Dalteparin injections
- Complete Dalteparin counselling
- Discharge to GP once agreed that they will prescribe further Dalteparin and a safe means of administration has been organised
- Anti-Xa levels may be indicated in obesity, renal impairment.
- Follow up at 6 weeks for review and to decide on duration of therapy

No

Can patient be treated with Apixaban?

- Age ≥ 18years old
- Weight > 50 kg and <120kg (for body weight >120Kg discuss with senior doctor as off label LMWH dosing and LMWH monitoring may be required)
- Cognitively intact (or adequate carer support)
- Acceptable kidney function (Creatinine Clearance ≥ 15mls/min) Use NHSL creatinine clearance calculator available on the intranet
- Not pregnant or breast feeding
- No antiphospholipid syndrome
- No bleeding disorder or increased risk of bleeding
- No liver disease with cirrhosis and/or coagulopathy
- Not taking the following medications
  - CYP3A4 inhibitors (eg triazole and imidazole antifungals [except fluconazole], protease inhibitors [HIV antiviral drugs])
  - CYP3A4 inducers (eg rifampicin, phenytoin, carbamazepine, St. John's wort)

Yes →

Prescribe Apixaban

- See Apixaban Prescribing Guidance including Prescriber Information, Counselling and GP letter
- Ensure patient has Apixaban counselling
- For patients with venous thrombosis Apixaban should be commenced 24 hours after last dose of Dalteparin given
- Stop concomitant antiplatelet/anticoagulant/NSAID
- **If on antiplatelets post ACS or PCI/stents do not stop - must discuss with Cardiology.**
- Follow up at 6-12 weeks for review and to decide on duration of therapy.
- Thrombophilia testing is not indicated in the acute setting. Refer to current BCSH guidelines if needed.

No

Warfarin therapy

- Patient has daily INRs, dalteparin injections and adjustment of warfarin dosage as per Fennerty regime (See NHS Lothian Antithrombotic Guideline) until patient has had 5 days of dalteparin **and** INR has been above 2.0 for 2 days.
- Ensure patient has warfarin counselling and is not pregnant.
- Ensure warfarin tablets and yellow anticoagulant book issued and checked and patient records daily INR and warfarin dose in this.
- Follow up at 6-12 weeks for review and to decide on duration of therapy.
- Thrombophilia testing is not indicated in the acute setting. Refer to current BCSH guidelines if needed.