### Suspected Deep Vein Thrombosis (DVT) Assessment

#### Patient Details

- **Hospital/Location:**
  - Hairmyres
  - Monklands
  - Wishaw
- **Other (specify):**
- **Ward/Base:**
- **Date:**

#### Symptoms

#### Risk factors for DVT

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous DVT/PE</td>
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<tr>
<td>Combined oral contraceptive pill</td>
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<tr>
<td>Known Thrombophilia</td>
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<tr>
<td>IV drug abuser</td>
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<td>Recent surgery</td>
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<tr>
<td>Pregnancy</td>
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<tr>
<td>Family history (DVT/PE/Thrombophilia)</td>
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<tr>
<td>Active cancer</td>
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</table>
Relevant past medical history

Drug history

Known allergies:  Yes  No

Examination

Observations
Pulse: ........................................
BP: ...........................................
Respiratory rate: .........................
Temp: ........................................
\( \text{O}_2 \) saturation: ...................
Weight: ................................. kg

Calf size (10cm below tibial tuberosity)
Right: ......................... cm
Left: ................................. cm

Score 1 for each category. Subtract 2 if alternative diagnosis is as likely or greater than DVT.

**Wells Score**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Yes</th>
<th>No</th>
<th>Score</th>
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<tbody>
<tr>
<td>Active cancer (ongoing or palliative)</td>
<td></td>
<td></td>
<td>1</td>
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<tr>
<td>Paralysis, paresis, recent plaster, immobilisation of lower limbs</td>
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<tr>
<td>Recent bedrest &gt;3 days or major surgery within 12 weeks</td>
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<tr>
<td>Localised tenderness along distribution of the deep venous system</td>
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<td>1</td>
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<tr>
<td>Thigh and calf swollen</td>
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<td>1</td>
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<tr>
<td>Calf swelling 3cm &gt; asymptomatic leg</td>
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<td>1</td>
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<tr>
<td>Pitting oedema symptomatic leg</td>
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<td></td>
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<tr>
<td>Dilated superficial veins (non varicosed) symptomatic leg</td>
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<td>1</td>
</tr>
<tr>
<td>Previously documented DVT</td>
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<td>1</td>
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<tr>
<td>Alternative diagnosis is as likely or ( \geq ) DVT</td>
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<td></td>
<td>-2</td>
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</tbody>
</table>

Specify alternative diagnosis:

**DVT unlikely if score <2; DVT possible if score \( \geq 2 \)**

Total score
Management of suspected DVT

Is DVT a differential diagnosis?

NO → Treat patient’s condition

YES → Wells score

Score < 2 → D-dimer Sample

D-dimer

Score ≥ 2 → Positive

Start Low Molecular Weight Heparin (Tinzaparin)
Doppler u/s within 48 h
Ensure suitability for OP management

Doppler negative → Negative D-dimer at presentation

Doppler positive for DVT

Doppler u/s

Positive D-dimer at presentation

Reassess leg symptoms and signs.
Consider other potential diagnoses.
Stop LMWH.
If no alternative diagnosis and DVT still suspected, repeat doppler in 1 week.

Doppler negative → DVT excluded
Consider other causes for symptoms
(if in doubt discuss with senior medical staff)
Refer back to GP

Doppler positive for DVT → DVT confirmed
Refer for senior medical review

D-dimer positive

D-dimer negative

Doppler u/s
Consider inpatient assessment in following circumstances:

- Immobility/severe pain
- Possible PE
- Social circumstances
- Active peptic ulcer
- Pregnancy (refer to obs/gyn middle grade on call)
- Uncontrolled hypertension
- High risk of bleeding
- Patient unable to understand instructions
- Inherited bleeding tendency
- Heparin-induced thrombocytopenia

Management Plan (tick box)

- DVT excluded → discharged back to GP
- DVT excluded → referred to other clinician, specify: .................................................................
- DVT requires confirmation/exclusion by US as an outpatient
- DVT requires confirmation/exclusion as an inpatient because patient unsuitable for outpatient management
- DVT confirmed (refer to senior Medical team)

If patient continues on outpatient management protocol:

- Discuss diagnosis and treatment plan with patient .................................................................
- Prescribe and administer LMWH ........................................................................................
- Issue emergency patient information sheet ........................................................................
- Book US appointment: Date xxxxx/xxxx/xxxx Time xxxxx/xxxx
- and review appointment within 48 hrs: Location xxxxx/xxxx/xxxx Time xxxxx/xxxx

If no US slot available, see Radiologist

LMWH

<table>
<thead>
<tr>
<th>Dose:</th>
<th>Route:</th>
<th>Date (1st dose):</th>
<th>Date (2nd dose):</th>
<th>Date (3rd dose):</th>
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Tinzaparin

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Clinician/Prescriber signature

PRINT NAME
If DVT excluded, which of the following diagnoses need consideration and treatment (tick box):

- Bakers Cyst
- Cellulitis
- Superficial thrombophlebitis
- Musculoskeletal
- Arterial or venous insufficiency
- Other, specify:

Additional information after initial assessment/US report
**Confirmed DVT/outpatient management**

**Consultant/Medical Review**

All patients need a detailed history, full examination and **chest x-ray**. Provoking factors should be identified. Unprovoked DVT should raise the possibility of underlying sinister pathology such as neoplasm.

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<tr>
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<td>Abdominal mass on examination</td>
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- Review all current medications
- Consider stopping contra-indicated medications

Advice for patients taking oral contraceptive pill - **consider alternative method of contraception**

If the answer to any of these questions is YES, consider possibility of malignancy and further investigation:

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**Confirmed DVT/outpatient management**

- **DVT confirmed**
  - **Other patients**
    - Start oral anticoagulants
    - Apixaban if patient eligible and agreeable to DOAC
    - Warfarin if not suitable for apixaban
  - **Special patient groups**
    - Pregnancy: Enoxaparin 1mg/kg twice daily
    - Active cancer: LMWH with tinzaparin once daily
    - IVDU: LMWH with tinzaparin once daily
    - Patients with increased risk of bleeding: discuss with senior medical staff as to most appropriate anticoagulant therapy.

**Pregnancy:** ☐ Yes ☐ No  **(if yes, ORAL ANTICOAGULANTS CONTRAINDICATED)**

If patient pregnant, discuss with on call Obs/Gyn middle grader at WGH as patient will need early obstetric review and referral to MOT clinic.

Pregnant patients with acute VTE should be treated with **Enoxaparin 1mg/kg twice daily**

**Eligibility for Apixaban:**

**Inclusion criteria for Apixaban:**
- Age >18
- First DVT and/or PE
- Limited duration of anticoagulation to maximum of 6 months
- Patients more likely to be compliant with regular medications

**Exclusion criteria for Apixaban:**
- Creatinine clearance <15 ml/min
- Patients on dual antiplatelet therapy following cardiac intervention
- Likely to require life-long anticoagulation
- Active Cancer where LMWH is drug of choice
- Pregnant or breastfeeding women
- Liver disease associated with cirrhosis and or coagulopathy
- Concurrent use of contra-indicated medications
  - Triazole and Imidazole antifungals (except Fluconazole)
  - Protease inhibitors
  - Strong CYP3A4 inducers e.g. Rifampicin, Phenytoin, Carbamazepine
- Patients considered unsuitable for any form of anticoagulation because of increased risk of bleeding

**Is patient eligible for Apixaban?** ☐ Yes ☐ No

For patients suitable for Apixaban:
- Start Apixaban 10mg twice daily for 1 week, to be issued by hospital pharmacy, followed by 5mg twice daily for 3-6 months (to be prescribed by GP)
- First dose of Apixaban to be administered 22-24hrs after last treatment date of LMWH.
**For patients to be started on apixaban, checklist:**
- Apixaban education
- Apixaban information sheet
- Apixaban alert card
- LMWH to be stopped before first dose of apixaban
- 7 days supply apixaban 10mg twice daily

**For patients to be started on warfarin, checklist:**
- Prescribe warfarin on NHSL oral anticoagulation chart
- Referred to anti-coagulation clinic - Date of first appointment 
- LMWH prescribed for 5 days or until INR >2 for 2 consecutive days (whichever is longer)
- 7 days supply of Warfarin
- Warfarin yellow book issued
- Warfarin education

**LMWH to be administered by:**
- Patient/carer
- District Nurse
- Hospital

**All patients with confirmed DVT:**
- Immediate discharge summary for GP
- Analgesia prescribed
- Patient given DVT information booklet
- Referred to appliance for Grade II compression stocking

**Suggested duration of anticoagulation** .................................................................

**Follow up:**
- None
- Yes Specify .................................................................

**Additional information for discharge summary (including information given to patient):**

<table>
<thead>
<tr>
<th>Clinician signature</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINT NAME</td>
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