

GP DVT DIAGNOSTIC PATHWAY NOTES

1. Calculating pre-test probability

Clinical Score from Wells et al NEJM 2003;349:1227	Score
Active cancer (treatment ongoing or within 6 months)	1
Paralysis, paresis or recent plaster immobilisation legs	1
Bedridden >3 days or major surgery <4 weeks	1
Localised tenderness in distribution of deep veins	1
Entire leg swollen	1
Calf swollen 3 cm > other (10cm below tibial tuberosity)	1
Pitting oedema in symptomatic leg only	1
Collateral superficial veins (non-varicose)	1
Previously documented DVT	1
Alternative diagnoses as likely or greater than DVT	-2

Exclusions

- Pregnant patients and those within 4 weeks post partum
 - ACC patients
- These patients should follow the normal referral process.

If the score is one or less the probability of DVT is low; DVT is unlikely.

If the score is two or more the probability of DVT is high; DVT is more likely.

Other potential risks;

Long distance flight (>6hrs) in previous 2 weeks

Current use OCP/HRT

If patient does not fulfil criteria for ultrasound access but clinical suspicion remains high discuss with the Emergency Department consultant (not registrar) on duty.

2. D-dimer

- D-dimer assay is available via all hospital and community laboratories.
- Office hours collection is available across the Waikato via all laboratories.
- 24 hr service is available via Waikato, Thames, Tokoroa, Te Kuiti and Taumarunui Hospitals and from Pathlab laboratories on an on call basis.
- Laboratory turn around time is <1 hr, but actual turn around is dependent on collection location. The test is stable for 24hrs so samples can be taken and stored overnight in the fridge if no immediate answer is necessary.
- Consideration should be given to providing enoxaparin protection to patients with a pre-test probability of 1 or less where clinical suspicion is high and there may be a delay of > 6 hours in accessing D-dimer.
- When a patient presents with a pre-test probability of two or more, refer straight to ultrasound in the first instance. In this scenario a D-dimer assay is ordered if the ultrasound is negative.

3. Assessment

If the pre-test probability is 1 or less and the D-dimer is negative, the risk of DVT is very low. If the patient develops progressive symptoms, reassess. All other patients require ultrasound.

Patients in whom DVT is excluded should be reviewed by their GP to consider other diagnoses.

Pre-test probability	D-dimer	Ultrasound required?	Ultrasound result	Outcome
1 or less	-ve	No	Not applicable	Low risk DVT. Reassess prn
1 or less	+ve	Yes	Positive	Needs treatment. Refer ED.
1 or less	+ve	Yes	Negative	Reassess 1 week
2 or more	-ve	Yes	Negative	Reassess 1 week
2 or more	+ve	Yes	Negative	Rescan 1 week
2 or more	+ve	Yes	Positive	Needs treatment. Refer ED.

4. Ultrasound Access – Refer on GP DVT Diagnostic Pathway referral form.

Week day/normal hours – Refer to any of the following	After 5pm Friday, All day Saturday, Sunday and Public Holidays.
Hamilton Radiology 07 839 4909/0800 426 723 MSK (Cambridge) 07 823 1090 Tristram Vascular Ultrasound 07 838 1035 Waikato Radiology 07 834 3530 Thames Hospital 07 868 3807 Horizon 0800 888 7226	Waikato Hospital 07 839 8676 ask for on call radiology registrar to arrange appointment. Patient to take completed GP DVT Diagnostic Pathway referral form to Waikato Hospital ED reception who will advise radiology registrar that patient is waiting.

5. Enoxaparin

If ultrasound is indicated but will be delayed for more than 6 hours, or if the result of D-dimer will be delayed more than 6 hours and clinical suspicion is high, the patient should be given an initial dose of enoxaparin provided there are no contraindications.

Dose: 1.5 mg/kg subcutaneous once daily to a maximum of 180mg.

Obese, pregnant, patients with active cancer, the elderly, women less than 45kg, men < 57kg or creatinine clearance of < 30ml/min will need subsequent dosage adjustment should they be proven to have DVT and require treatment.

If in any doubt discuss with the Haematology consultant on call.

Absolute Contraindications to Enoxaparin: Refer Emergency Department	Relative contraindications: Contact on call haematologist
Known adverse reaction Recent heparin induced thrombocytopenia Active bleeding Liver disease Uncontrolled hypertension (diastolic > 110mmHg and/or systolic > 200mmHg) Recent eye (except cataract) or CNS surgery (<1 month) Recent haemorrhagic stroke (<1 month) Thrombocytopenia (platelets < 60x10 ⁹ /l) Significant compliance concerns	Angiodysplasia Thrombocytopenia (platelets 60-100)