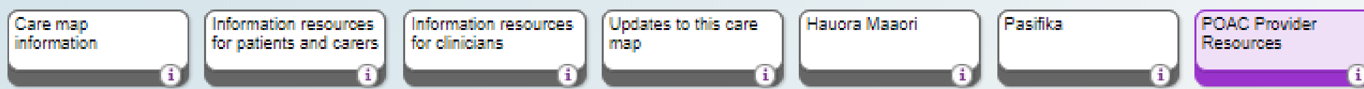
Deep Vein Thrombosis (DVT)

This care map has been locally developed for use in MidCentral District

Key



26 Commence oral anticoagulant therapy (Primary care)

There are 3 options for treating a DVT: Rivaroxaban (NZF), Dabigatran (NZF) or Warfarin (NZF):

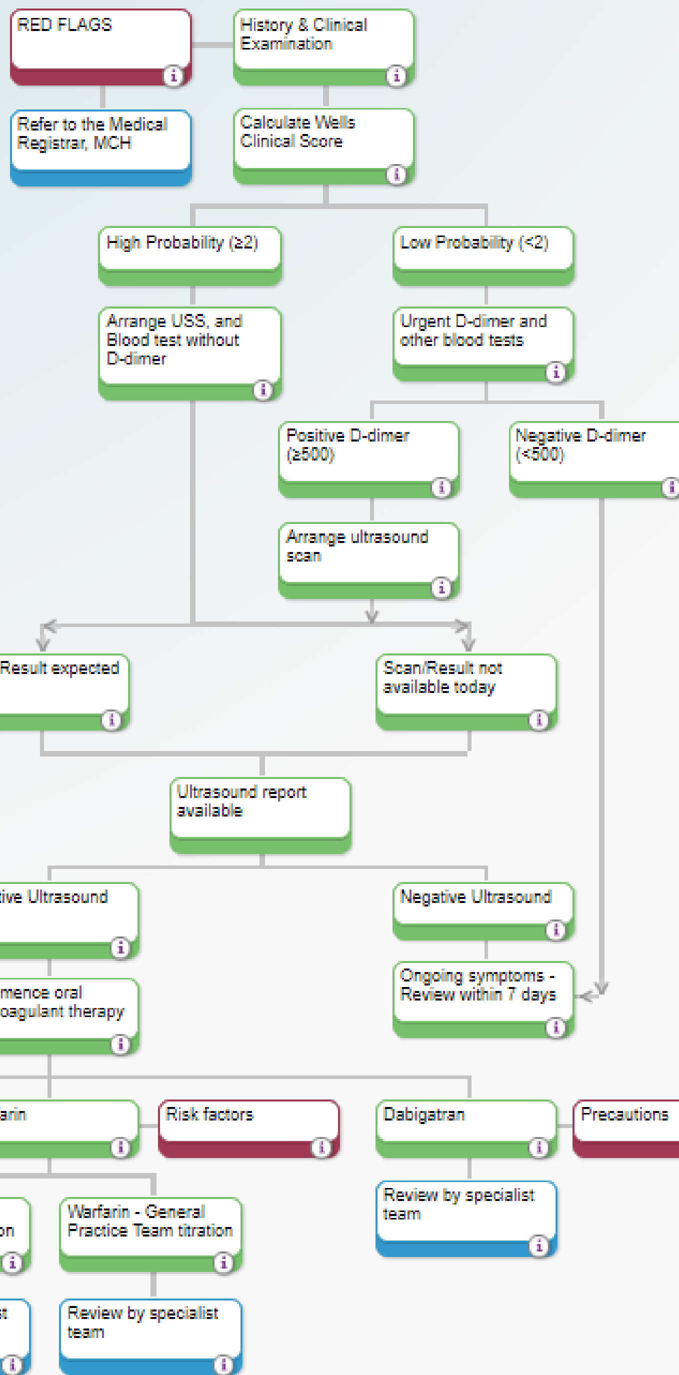
- each medication has advantages and disadvantages. They have different side-effect profiles, therefore it is reasonable to try an alternative if your patient experiences side-effects with one medication.
- the large multicentre trials suggest that Rivaroxaban and Dabigatran have a lower incidence intracranial bleeding than Warfarin, so consider one of the newer anticoagulants as first choice. However these drugs should be used with caution in patients with renal impairment (especially Dabigatran) as they can accumulate and cause bleeding.
- Warfarin and Dabigatran can be reversed rapidly. There is no reversal agent for Rivaroxaban.
- **the frail elderly at high risk of falls need special consideration and we recommend specialist consultation for this group**
- consider all medications a patient is currently taking including over the counter herbals etc – to assist patients to make an informed choice

Discuss advantages and disadvantages of Rivaroxaban, Warfarin and Dabigatran with patient, allowing the patient to make an informed choice.

Rivaroxaban – consider as first option. NB: should not be used in a patient with weight >120kg or with previous gastric bypass surgery.

Dabigatran – consider as first option in patients where rapid reversal of anticoagulation is important. NB: should not be used in a patient with weight >120kg or with previous gastric bypass surgery.

See electronic pathway for details on each drug's advantages and disadvantages (http://carepathways.waikatodhb.health.nz/).



8 RED FLAGS (Red flag)

Quick info:

Refer immediately if:

- suspected deep vein thrombosis (DVT) in pregnancy
- suspected Pulmonary Embolism (PE)
- heparin allergy
- heparin induced thrombocytopenia
- contraindications to anti-coagulation therapy include:
  - haemophilia or any other known bleeding disorders
  - active bleeding
  - platelets <75 [1,5]

Associated other comorbidities:

- clotting disorder

27 Rivaroxaban (Primary care)

Rivaroxaban:

- Rivaroxaban can be used for the acute management of DVT, Enoxaparin treatment is not required
- **exclude patients with moderate-severe renal impairment (i.e. CrCl <50 ml/min)** - recommend discussion with Haematology in this group
- **use with caution** in patients with abnormal LFTs – Rivaroxaban has been associated with raised transaminases

Starting treatment:

- when DVT confirmed
- commence Rivaroxaban at **15mg oral twice daily for the first 3 weeks**, then reduce dose to -
  - **Rivaroxaban 20mg oral once daily**

Useful information for patients:

- Rivaroxaban (Xarelto) patient Information

28 Rivaroxaban Precautions (Red flag)

- a recent creatinine and CrCl should be obtained prior to commencing rivaroxaban
- if CrCl <50ml/min, Rivaroxaban should not be used - consult with Haematology
- use with caution in patients with abnormal liver function (recent test required) – raised transaminases have been reported with rivaroxaban
- assess other risk factors such as falls risk
- NB: there is no reversal agent available for rivaroxaban

A referral to Haematology is required to initiate a follow up appointment in the Thrombosis Clinic for all patients commenced on Rivaroxaban to determine the duration of therapy.

29 Warfarin (Primary care)

Enoxaparin (Clexane)/Warfarin Pack:

- Enoxaparin (Clexane) information - NZ Formulary

The patient has a confirmed deep vein thrombosis (DVT) and needs anticoagulant therapy. Assess the patient's suitability for anticoagulation.

Considerations:

- if a patient weighs more than 100Kg we recommend clexane 1mg/kg bd up to a max of 150mg bd
- for a patient over 150kg we recommend 150mg bd OR
  - discuss with on-call Haematologist
- if the patient has renal impairment (CrCl <30ml/min), commence Enoxaparin (Clexane) 1mg/kg - use the Cockcroft Gault Score calculator to determine correct dosage

Starting anticoagulant therapy

Advise the patient on how to start treatment. The standardised starter pack contains 8 doses of Enoxaparin (Clexane) (the patient will be given the correct dose based on their weight) and 100 x 1mg Warfarin tablets.

Timing of oral anticoagulant therapy:

- treatment should be taken at the same time each day
- evening dosing preferred as the INR should be measured 16 hours after a dose of Warfarin (i.e. the following morning)

Useful information for patients:

- Day 4 INR Instructions
- Herbal Medicines & Warfarin
- Warfarin patient information brochure
- Patient administration guide - Enoxaparin (Clexane)

30 Risk factors (Red flag)

Patients with any of the following risk factors may be particularly sensitive to warfarin or may have an increased risk of bleeding. In these patients, consult with Haematology:

- frail elderly
- baseline INR >1.5
- PCV <0.3
- creatinine >200µmol/L
- gastrointestinal bleed
- uncontrolled CHF
- major surgery <14 days
- albumin <30mg/L
- bilirubin >20µmol/L
- platelets <50x109 / L
- active malignancy
- recent stroke
- alcoholism
- severe hypertension

31 Dabigatran (Primary care)

Dabigatran information - NZ Formulary - **never use Dabigatran and Enoxaparin (Clexane) at the same time** - Dabigatran to start on day 6.

It is important that the person receives 5 doses of therapeutic Enoxaparin (Clexane) 1.5mg/kg (adjust for renal impairment) for 5 days ***PRIOR*** to commencing the Dabigatran:

- if a patient weighs more than 100Kg we recommend clexane 1mg/kg bd up to a max of 150mg bd
- for a patient over 150kg we recommend 150mg bd

Exclude patients with moderate-severe renal impairment (i.e. CrCl <50 ml/min):

- consultation with Haematology is recommended with this group

Dabigatran 150mg bd is the recommended dosage for a person with confirmed DVT (110mg bd dose is not appropriate for DVT treatment).

Patients with adequate renal function (CrCl >50 ml/min) should be treated with a daily dose of 300 mg taken orally as 150 mg capsules twice daily.

Starting anticoagulant therapy

Advise the patient on how to start treatment. The standardised starter pack contains only 5 doses of Enoxaparin (Clexane) (1.5mg/kg s/c daily) alongside a script for Dabigatran (as per NZ Formulary).

- Patient **ONLY** to commence Dabigatran once Enoxaparin (Clexane) treatment has finished.
- The first dose of Dabigatran should be given 24 hours after the 5th dose of Enoxaparin (Clexane).

If there are any concerns regarding patient therapy consult with Haematology.

Useful information for patients:

- Dabigatran patient information

32 Precautions (Red flag)

Use in caution in persons >75 years. A creatinine and CrCl should be obtained prior to commencing the Dabigatran. If CrCl <50ml/min Dabigatran should not be used.

A referral to Haematology is required to initiate a follow up appointment in the Thrombosis Clinic for all patients commenced on Dabigatran to determine the duration of therapy.

Assess other risk factors such as falls risk.

Disclaimer: This flowchart is a guide only. Professional judgement should be used in all instances.

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