

## Deep Venous Thromboembolism (DVT)

### Nomenclature:

- **Provoked DVT** - Caused by a known event (e.g, surgery, hospital admission)
- **Unprovoked** - No identifiable provoking environmental event for DVT is evident
- **Distal DVT** - located below the knee in the calf veins (excluding popliteal vein)
- **Proximal DVT** - Thrombus that is located in the popliteal, femoral, or iliac veins

### Symptoms and Signs:

- Limb pain along the line of the deep veins (*Sn. 86%, Sp. 19%*)
- Leg swelling (*Sn. 93%, Sp. 33%*)
- Unilateral swelling of calf or thigh
- Skin discolouration and distension superficial veins.
- Increase skin temperature (*Sn. 72%, Sp. 48%*)

### Modified Well's diagnostic score

Score 1 point for each of following and subtract 2 points if alternative diagnosis is as likely as DVT

- Active Cancer
- Paralysis or recent plaster on legs
- Bedridden for 3 or more days
- Major surgery previous 12 weeks
- Localised tenderness along deep venous system
- Entire leg swollen or calf swelling more than 3cm compared with asymptomatic leg.
- Pitting oedema confined to symptomatic leg
- Collateral superficial veins
- Previous DVT

Unlikely DVT = Score of 1 or less (*look for alternative dx*)

Likely DVT = Score of 2 or more

### Management

- If Wells score 2 or more Ultrasound Doppler leg.
- If Ultrasound positive commence treatment and look for possible underlying cancer.
- If Ultrasound negative but high clinical suspicion, then discuss with consultant and order a *D-dimer*. Consider extending the US to include the iliac vein. If *D-dimer* elevated, initiate empiric anticoagulation and rescan in 6-8 days

### Treatment

Line of Therapy	Indications	Contraindications	Dose
<b>First Line</b> Rivaroxaban	Preferred therapy for all stable patients	End-stage renal disease (CrCl <15 mL/min)	CrCl ≥15 mL/min: 15 mg PO BD for 21 days, THEN 20 mg PO OD
<b>Second Line</b> Warfarin	-ESRD -Consider if financially/availability untenable for 1 <sup>st</sup> line	-Pregnancy	2.5mg OD max 10mg OD. *Overlap required *Refer anticoag guide
<b>Third Line</b> Enoxaparin	-Pregnancy -Second agent during warfarin loading	-If unsustainable	1 mg/kg SC BD, OR 1.5 mg/kg SC OD

\*Overlap Warfarin and Enoxaparin or Rivaroxaban for at least 5 days until desired INR (2-3) maintained for 24 hours, then discontinue parenteral therapy. INR Check 2 weekly till stable then monthly

**Duration of therapy:** Minimum duration is 3 months. Extension will be decided at the end of the 3 months with consultant input

### Consultant review if any of the following:

Recurrent DVT  
*Unprovoked DVT*  
Suspicion of P.E

Outpatient loading of warfarin.  
Distal asymptomatic DVT  
DVT in pregnancy or breastfeeding