



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

DEEP VEIN THROMBOSIS (SUSPECTED)

Lower limb

Date: _____ Time: _____ Assessment nurse: _____ Sign: _____

INCLUSION CRITERIA

Suspected lower limb DVT *e.g unilateral leg swelling, pain, redness, warmth, dilated veins*

EXCLUSION CRITERIA

Upper limb DVT

Suspected PE *unexplained shortness of breath, tachycardia, haemoptysis, tachypnoea, collapse, pleuritic chest pain*

Select Treatment Pathway on Whiteboard

Enter actual time started
Data collected for Ministry of Health

STOP!

Not suitable for this Best Care Bundle
Select 'BCB removed' Treatment Pathway
Continue usual nursing cares

NURSING ASSESSMENT

History, examination, vital signs *Document on nursing assessment record*

Bloods ✓ FBC ✓ U&E ✓ LFT ✓ Baseline coags, ✓ β-HCG for all females < 50y
DDIMER: Clinician to request, if indicated (see page 2)
↳ No IVL unless nursing or clinician concern

Weight: _____ kg Height: _____ cm

Provide DVT patient advice sheet

RED FLAGS *All red flag boxes must be populated* = YES = NO

HR > 110 bpm HR < 50 bpm Clinical concern

RR > 24 pm Systolic BP < 90 mmHg SPO2 < 90 %

<input type="checkbox"/> NO RED FLAGS Continue Best Care Bundle	<input type="checkbox"/> RED FLAGS PRESENT (ANY) → Senior Dr review ASAP (<i>SMO / Senior Registrar</i>) Dr Name: _____ Sign: _____ <input type="checkbox"/> Continue Best Care Bundle. Intervention if any: _____ <input type="checkbox"/> Exit Care Bundle: Reason: _____ ↳ Select 'BCB removed' in TP column, Electronic Whiteboard.
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WEEKDAY 08H00-16H00

Advise clinician *EM doctor, CNS, NP, or Gen Med Reg*
This is to expedite the USS request if appropriate. This process is different, depending on the time of day. See request process p 3

AFTER HOURS

Continue usual cares
Await clinician review

DVT (SUSPECTED) BEST CARE BUNDLE PATHWAY

7.7.213 A



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SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

DEEP VEIN THROMBOSIS SUSPECTED

To be used in conjunction with clinical judgement

WELLS' SCORE

↳ calculate and document in Eclair

<input type="checkbox"/> Active cancer (Rx ongoing or Rx within 6/12)	+1
<input type="checkbox"/> Previously documented DVT	+1
<input type="checkbox"/> Bedridden recently > 3 days or major surgery within 4 weeks	+1
<input type="checkbox"/> Paralysis, paresis, or recent plaster immobilisation of lower extremity	+1
<input type="checkbox"/> Localised tenderness along the deep venous system	+1
<input type="checkbox"/> Pitting oedema, greater in the symptomatic leg	+1
<input type="checkbox"/> Calf swelling > 3cm compared to other leg	+1
<input type="checkbox"/> Entire leg swollen	+1
<input type="checkbox"/> Collateral (non-varicose) superficial veins present	+1
<input type="checkbox"/> Alternative diagnosis to DVT as likely or more likely	-2
TOTAL SCORE	

WELLS' SCORE ≥ 2

Arrange USS of the affected leg.
See process on page 3

Is the patient pregnant? Document on request form 'Please visualise pelvic veins'

Ideally the USS should occur within 24 hrs. POAC is the preferred service.

NSH & WTH: The request process is different depending on the day and time. Please follow request procedure on p3 meticulously to avoid confusion. This is particularly important on the weekend and public holidays.

WELLS' SCORE < 2

Is there another reason for a positive DDIMER?

Recent surgery Trauma
 Malignancy Recent pregnancy

Yes

No

Do DDIMER

POSITIVE

NEGATIVE

Consider alternative diagnoses

Discuss with senior clinician

Not for USS unless endorsed by SMO or Haematology

Advise GP to consider USS in 5 - 7 days if no improvement or no obvious alternate diagnosis

DVT BEST CARE BUNDLE



= YES = NO

(PLACE PATIENT LABEL HERE)

SURNAME: _____ NHI: _____

FIRST NAMES: _____

Date of Birth: ____ / ____ / ____ SEX: _____

USS REQUEST PROCEDURE: THE PROCESS IS DAY AND TIME DEPENDANT

<input type="checkbox"/> Sun 08h00 - Fri 16h00 or Public holiday <i>Single day</i>	<p>Same day or next day USS, preferably through POAC. <i>Preferred service.</i></p> <p><i>In general, POAC will be able to provide an USS within 24 hrs for requests made on Sundays, week days and single day public holidays.</i></p> <p>POAC: Fax request and EDS to (09) 535-7154.</p> <ul style="list-style-type: none"> • POAC will confirm appointment with patient and general practitioner by phone. Ensure patient phone number is on the request. • Advise patient to see GP or A & M clinic after the USS, with the results. • Provide patient information sheet <p>If WDHB USS is needed:</p> <ul style="list-style-type: none"> • Use the usual USS E-request tab: <i>(Not the pathways tab).</i> • Select 'This admission' • All cases must be discussed with the Radiology liaison, or directly with the booking clerk. NSH: 42606 WTH: 46299 / 46794
<input type="checkbox"/> Fri 16h00 - Sat 08h00	<p>All WDHB weekend scans will be performed at NSH</p> <ul style="list-style-type: none"> • Use the pathways E-request tab <i>not the usual USS tab.</i> <i>Only available for requests placed in these hours</i> • Select 'This admission' • No need to discuss with Radiology • Radiology clerk will contact the patient with appointment time
<input type="checkbox"/> Sat 08h00 - Sun 08h00	<ul style="list-style-type: none"> • Use the usual USS E-request tab: <i>(Not the pathways tab).</i> • Select 'This admission' • All cases need to be discussed with NSH Radiology liaison 42606 • Radiology liaison will advise a time for Saturday or Sunday
<input type="checkbox"/> Public holiday <i>Multi day</i>	<ul style="list-style-type: none"> • Discuss with Haematologist via operator • Consider Gen Med admission for inpatient USS esp if high suspicion • Consider POAC if a single day public holiday
<input type="checkbox"/> Unable to arrange USS within 24 hrs	

Consider Rivaroxaban or Enoxaparin anticoagulation if delay to USS > 6hrs

ANTICOAGULATION GUIDE

ANY HIGH RISK FEATURES PRESENT? (EXCLUSION CRITERIA)

<input type="checkbox"/> Age < 18 years	<input type="checkbox"/> Known allergy to enoxaparin
<input type="checkbox"/> Haemorrhagic stroke within 3 months	<input type="checkbox"/> Thrombocytopenia
<input type="checkbox"/> History of abnormal bruising or bleeding	<input type="checkbox"/> Severe or poorly controlled hypertension
<input type="checkbox"/> History of peptic ulcer disease / GI bleeding < 3 months	<input type="checkbox"/> Severe liver function impairment
<input type="checkbox"/> Renal impairment: creatinine clearance < 30 mL/min	<input type="checkbox"/> Already anticoagulated / dual antiplatelet Rx

NO HIGH RISK FEATURES

YES

ANTICOAGULATION for all where the delay to USS is > 6 hrs
See formulary page 4. Suspected DVT section

Discuss with Haematology on call

Consider Gen Med admission for inpatient USS

FORMULARY

CHECK ALLERGY STATUS AND SEE MEDSAFE OR OTHER TEXT FOR FULL LIST OF CONTRAINDICATIONS**

SUSPECTED DVT AWAITING ULTRASOUND > 6 HRS

Rivaroxaban	<i>First choice</i>	Contra-indications: <input type="checkbox"/> Pregnancy / breast feeding (all ♀ < 50 should have neg BHCG) <input type="checkbox"/> ♀ with menorrhagia <input type="checkbox"/> High bleeding risk <input type="checkbox"/> CrCl < 30 mLs
<i>USS in 6-12 hrs</i>	15 mg STAT	
<i>USS in 12-24 hrs</i>	15 mg BD	
Enoxaparin	<i>Second choice</i>	
<i>USS in 6-12 hrs</i>	< 45 kg or CrCl < 30 mLs/min	1 mg / kg STAT
	> 45 kg	1 mg / kg STAT <i>Max 150 mg</i>
<i>USS in 12-24 hrs</i>	< 45 kg or CrCl < 30 mLs/min	1 mg / kg OD
	> 45 kg	1 mg / kg BD <i>Max 150 mg</i>

TREATMENT GUIDE FOR CONFIRMED DVT

DISTAL DVT <i>Below popliteal vein</i>	<input type="checkbox"/> Discuss with thrombosis team WTH 46806 NSH 43788 / On call Haematologist
PROXIMAL <i>Popliteal vein & above</i>	<input type="checkbox"/> Refer all to the Thrombosis team <input type="checkbox"/> Gen Med admission if idiopathic** See CeDS for Investigations idiopathic DVT's <input type="checkbox"/> Anticoagulate as per guide below <i>unless contraindicated</i> <input type="checkbox"/> Consider IVC filter if anticoagulation contraindicated
ILEO-FEMORAL	<input type="checkbox"/> Refer to General Medicine - admit all for a minimum 24 hrs <input type="checkbox"/> Discuss with Haematology / Thrombosis team WTH 46806 NSH 43788 <input type="checkbox"/> Anticoagulate - Enoxaparin 1mg/kg BD mono therapy first 7 days <input type="checkbox"/> Early consideration of catheter directed thrombolysis (CDT) <input type="checkbox"/> Bedrest 7 days for symptom management, can mobilise to bathroom

CONFIRMED DVT FORMULARY

Discuss all cases with Thrombosis team WTH 46806 NSH 43788 / or on call Haematologist

Rivaroxaban	15 mg BD Oral for 3 weeks, then 20mg OD	<i>First choice. No Enoxaparin bridging required. If patient has had a dose of Enoxaparin, commence Rivaroxaban when next dose would have been due</i> Contra-indications: <input type="checkbox"/> Pregnancy / breast feeding <i>all ♀ < 50 should have neg BHCG</i> <input type="checkbox"/> ♀ with menorrhagia <input type="checkbox"/> High bleeding risk <input type="checkbox"/> CrCl < 30 mLs
Enoxaparin	<i>Followed by Dabigatran or Warfarin as below</i>	
<i>Inpatient</i>	< 45 kg or CrCl < 30 mLs/min	1 mg / kg OD
	> 45 kg	1 mg / kg BD <i>Max 150 mg</i>
<i>Outpatient</i>	< 45 kg or CrCl < 30 mLs/min	1 mg / kg OD
	45 - 100 kg	1.5 mg / kg OD <i>Max 150 mg</i>
	100 - 150 kg	1 mg / kg BD <i>Max 150 mg / dose</i>
	> 150 kg	D/W Haematology via operator. <i>After hours start 1mg/kg STAT max 150 mg</i>
	<input type="checkbox"/> Script for five days <input type="checkbox"/> Complete special authority <i>Instructions on CeDS. Online or fax.</i> <input type="checkbox"/> Ensure patient able to self-inject or arrange to attend A & M clinic for daily injections <input type="checkbox"/> Sharps container for patients who will self-inject <i>provided by hospital outpatient pharmacy</i>	
Dabigatran	150 mg BD	Distal and superficial vein thrombosis: may commence dabigatran without 5 days of LMWH Proximal DVT: Precede with 5 days Enoxaparin monotherapy as above On day 6: Stop LMWH, Start dabigatran 150mg BD No renal dose adjustment. Contraindicated if CrCl < 30ml/min, caution if <40 ml/min
	110 mg BD	For > 80 yrs, or > 75 yrs with high bleeding risk
Warfarin	Start concurrently with Enoxaparin 5/7. Load as per Yeti nomogram. <i>Usually done by Gen Med / Thrombosis service</i>	

DISCHARGE CHECKLIST FOR CONFIRMED DVT MANAGED AS OUTPATIENT

<input type="checkbox"/> Complete referral to Thrombosis service: <i>E-referral > Outpatient > Haematology > Thrombosis</i>
<input type="checkbox"/> Patient advice: Provide DVT patient advice sheet <i>In the bundle or CeDS</i>
<input type="checkbox"/> GP Advice: Risk factor modification including BP control, lipids, smoking, oestrogen containing meds etc