Postnatal venous thromboprophylaxis risk (VTE) assessment sheet

Assess woman postnatally and if re-admitted postnatally.

All women must be given verbal and written information on VTE. Information given ❐

Date	Gestation	Risk category		action	comments	signature/designation
		High	❐	LMWH* ANC		
		Intermediate	❐	LMWH* ANC		
		Low	❐	Advice only		

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		Low	❐	Advice only		

*Balance risk of bleeding against risk of VTE. Women at high risk of hemorrhage with risk factors including major antepartum hemorrhage, coagulopathy, progressive wound hematoma, suspected intra-abdominal bleeding and postpartum hemorrhage may be managed with foot impulse devices, intermittent pneumatic compression devices or Anti- embolic stocking.

Postnatal prophylactic dose of Low Molecular Weight Heparin (LMWH)

Once daily dosing for postnatal prophylaxis.

Booking weight	Once daily dosing
< 50 kg	2500 units once daily
50 - 90 kg	5000 units once daily
91 - 130kg	7500 units once daily
131-170 kg	10000 units once daily
> 170 kg	Discuss with Consultant Haematologist

Use a combination of 2500 unit, 5000 unit, 7500 unit and 10000 unit dalteparin pre-filled syringes.

For obstetric use dalteparin is a red (hospital only) drug and ongoing supplies should be prescribed by the hospital clinician.

Version 5.4 Guidance based on RCOG Green-top Guideline No 37a April 2015 and NICE CG 92 January 2010. Approved by DTC December 2010. Revised June 2015. Next review due June 2018

Antenatal venous thromboprophylaxis (VTE) risk assessment and management (to be assessed at booking, 36 weeks gestation and repeated at any hospital admission)

Document on risk assessment sheet overleaf

Tick box below

- ❐ Any previous VTE (except a single event related to major surgery)

→ **❑ High risk**
Requires antenatal prophylaxis with LMWH
Refer to Obstetric Consultant in the 1st trimester

- ❑ Hospital admission Please see below
- ❑ Single previous VTE related to major surgery
- ❑ High-risk thrombophilia + no VTE (see below)
- ❑ **Medical comorbidities** e.g. cancer, heart failure, active SLE, IBD or inflammatory polyarthropathy, nephrotic syndrome, Type 1 DM with nephropathy, sickle cell disease, current IVDU
- ❑ Any surgical procedure e.g. appendectomy
- ❑ Ovarian hyperstimulation syndrome OHSS (first trimester only)

→ **❑ Intermediate Risk**
Consider antenatal prophylaxis with LMWH
Refer to Obstetric Consultant

- ❐ Obesity (BMI > 30kg/m²)
- ❐ Age > 35 years
- ❐ Parity ≥ 3
- ❐ Smoker
- ❐ Gross varicose veins
- ❐ Current pre-eclampsia
- ❐ Immobility e.g. paraplegia, PGP
- ❐ Family history of unprovoked or Oestrogen-provoked VTE in first-degree relative
- ❐ Low-risk thrombophilia
- ❐ Multiple pregnancy
- ❐ IVF/ART <12/52 weeks gestation.

→
- ❑ Four or more risk factors: Consider antenatal prophylaxis from first trimester
- ❑ Three risk factors: Consider antenatal Prophylaxis from 28 weeks

→ Fewer than three risk factors → **❑ Lower risk**
Mobilisation and avoidance of dehydration

Transient risk factors: Dehydration/hyperemesis, current systemic infection, long distance travel

Bleeding risks / exclusion criteria

Patient related

Active bleeding

Acquired bleeding disorders (e.g. acute liver failure)

Concurrent use of anticoagulants known to increase the risk of bleeding (such as warfarin with INR >2)

Acute stroke

Thrombocytopenia (platelets <75 x 10⁹/L)

Uncontrolled systolic hypertension (200 mmgHg or >120 mmgHg diastolic)

Untreated inherited bleeding disorders (such as haemophilia and von Willebrand's disease)

Severe renal disease (CrCl <30ml/min)

Severe liver disease (prothrombin time above normal range or known varices)

Women considered at increased risk of major haemorrhage (e.g. placenta praevia

Surgical procedure with a high bleeding risk

Lumbar puncture/epidural/spinal anaesthesia within the next 12 hours

Lumbar puncture/epidural/ spinal anaesthesia with in the previous 6 hours

Thrombophilias

Low risk (+ no previous VTE)

Heterozyqous

Prothrombin gene mutation / Factor V Leiden

Protein C deficiency

Protein S deficiency

High risk (+ no previous VTE)

Homozygous FVL/PGM or compound abnormalities

Anti-thrombin deficiency: Anti-phospholipid syndrome

Anticardiolipin antibodies / Lupus anticoagulant

Hospital admissions:

All women should receive LMWH for the duration of their admission.

If prolonged admission for 3 or more days or persistent transient risk factors, then LMWH should be considered for the duration of the pregnancy and up to 6 weeks postpartum.

Antenatal venous thromboprophylaxis risk (VTE) assessment sheet

Assess woman at booking and on each antenatal admission.

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Antenatal prophylactic dose of Low Molecular Weight Heparin (LMWH)

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Postnatal venous thrombophrophylaxis (VTE) risk assessment and management - to be assessed on delivery suite

- ❒ Any previous VTE
- ❒ Antenatal LMWH throughout A/N period
- ❒ High-risk thrombophilia
- ❒ Low risk thrombophilia +FHX of oestrogen related VTE

→ **❒ High risk**
Consider 6 weeks postnatal prophylactic LMWH

- ❒ Caesarean section in labour
- ❒ BMI>- $40kg/m^2$
- ❒ Readmission or prolonged admission (≥ 3 days)
- ❒ Any surgical procedure in the puerperium except immediate repair of the perineum
- ❒ Medical comorbidities e.g. cancer, heart failure, active SLE, IBD or inflammatory polyarthropathy, nephrotic syndrome, type 1 DM with nephropathy, sickle cell disease, current IVDU

→ **❒ Intermediate Risk**
Consider 10 days postnatal prophylactic LMWH
NB if persisting or > 3 risk factors consider extending prophylaxis with LMWH

- ❒ Age >35 years
- ❒ Obesity (BMI greater or equal to 30 Kg/m2)
- ❒ Parity Greater or equal to 3)
- ❒ Smoker
- ❒ Elective caesarean section
- ❒ Family history of VTE
- ❒ Low-risk thrombophilia
- ❒ Gross varicose veins
- ❒ Current systemic infection
- ❒ Immobility, e.g. paraplegia, PGP, long distance travel
- ❒ Current pre-eclampsia
- ❒ Multiple pregnancy
- ❒ Preterm delivery in this pregnancy (<37+0 weeks)
- ❒ Stillbirth in this pregnancy
- ❒ Mid-cavity rotational or operative delivery
- ❒ Prolonged labour (>24 hours)
- ❒ PPH > 1litre or blood transfusion

→ Two or more risk factors → Intermediate Risk

→ Fewer than two risk factors →

❑ Lower risk
Mobilisation and avoidance of dehydration

Bleeding risks / exclusion criteria

Patient related

- Active bleeding
- Acquired bleeding disorders (e.g. acute liver failure)
- Concurrent use of anticoagulants known to increase the risk of bleeding (such as warfarin with INR >2)
- Acute stroke
- Thrombocytopenia (platelets <75 x 10^9/L)
- Uncontrolled systolic hypertension (200 mmgHg or >120 mmgHg diastolic)
- Untreated inherited bleeding disorders (such as haemophilia and von Willebrand's disease)
- Severe renal disease (CrCl <30ml/min)
- Severe liver disease (prothrombin time above normal range or known varices)
- Surgical procedure with a high bleeding risk
- Lumbar puncture/epidural/ spinal anaesthesia with in the previous 6 hours

Thrombophilias

Low risk (+ no previous VTE)

- Heterozyqous
- Prothrombin gene mutation / Factor V Leiden
- Protein C deficiency
- Protein S deficiency

High risk (+ no previous VTE)

- Homozygous FVL/PGM or compound abnormalities
- Anti-thrombin deficiency: Anti-phospholipid syndrome
- Anticardiolipin antibodies / Lupus anticoagulant

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