### Antenatal Venous Thromboprophylaxis (VTE) Risk Assessment and Management

#### Postnatal Venous Thromboprophylaxis Risk Assessment Sheet

Assess woman postnatally and if re-admitted postnatally.

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Gestation</th>
<th>Risk category</th>
<th>action</th>
<th>comments</th>
<th>signature/designation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>☐ LMWH*</td>
<td>ANC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td>Low</td>
<td>☐ Advice only</td>
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</table>

#### Document on Risk Assessment Sheet Overleaf

Assess woman postnatally and if re-admitted postnatally.

Tick box below

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

#### Bleeding Risks / Exclusion Criteria

- 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.

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

#### Thrombophilias

- Low risk (+ no previous VTE)
- Heterozygous 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.

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*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 stockings.*

**Postnatal prophylactic dose of Low Molecular Weight Heparin (LMWH)**

Once daily dosing for postnatal prophylaxis.

<table>
<thead>
<tr>
<th>Booking weight</th>
<th>Once daily dosing</th>
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<tbody>
<tr>
<td>&lt; 50 kg</td>
<td>2500 units once daily</td>
</tr>
<tr>
<td>50 - 90 kg</td>
<td>5000 units once daily</td>
</tr>
<tr>
<td>91 - 130 kg</td>
<td>7500 units once daily</td>
</tr>
<tr>
<td>131-170 kg</td>
<td>10000 units once daily</td>
</tr>
<tr>
<td>&gt; 170 kg</td>
<td>Discuss with Consultant Haematologist</td>
</tr>
</tbody>
</table>

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.

### Edition Information

Antenatal venous thromboprophylaxis risk (VTE) assessment sheet

Assess woman at booking and on each antenatal admission. All women must be given verbal and written information on VTE. Information given □

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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 + FXH of oestrogen related VTE

□ Caesarean section in labour
□ BMI > 40kg/m²
□ 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 polyarthritis, nephrotic syndrome, type 1 DM with nephropathy, sickle cell disease, current IVDU

□ 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
□ Prolactim delivery in this pregnancy (<37+0 weeks)
□ Stillbirth in this pregnancy
□ Mid-cavity rotational or operative delivery
□ Prolonged labour (>24 hours)
□ PPH > 1 litre or blood transfusion

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 mmHg or >120 mmHg diastolic)
Unremitting 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

Lower risk

Mobilisation and avoidance of dehydration

Postnatal prophylactic dose of Low Molecular Weight Heparin (LMWH)

Once daily dosing for antenatal prophylaxis.

Booking weight | Once daily dosing
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< 50 kg         | 2500 units once daily
50 - 90 kg      | 5000 units once daily
91 - 133 kg     | 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.

* 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.

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