**Summary of Thromboprophylaxis Guidelines**

*See special populations for alternate dosing

* All patients on mechanical prophylaxis should be reassessed daily for medication

<table>
<thead>
<tr>
<th>Patient Group</th>
<th>Recommended Options</th>
<th>Initiation</th>
<th>Duration</th>
</tr>
</thead>
</table>
| Medicine      | Enoxaparin 40 mg subcutaneous daily  
For patients at high risk of bleeding,  
properly-fitted, bilateral calf-length TEDs  | 1<sup>st</sup> dosing time after admission  | Until discharge |
| Critical Care | Enoxaparin 40 mg subcutaneous daily  
Patients at high risk of bleed should receive  
properly-fitted bilateral calf-length TEDS  | 1<sup>st</sup> dosing time after admission  | Until discharge |
| Hip and Knee Arthroplasty |  
Preoperative  No prophylaxis  
Postoperative  Enoxaparin 40 mg subcutaneous daily  
Patients at high risk of bleed should receive  
properly-fitted bilateral calf-length TEDS  | 1<sup>st</sup> dose at 0830 on postoperative day 1 and continue daily  | Knee: 14 days  
Hip: 35 days  
*enoxaparin OR rivaroxaban  
(initiated at discharge) |
| Hip Fracture |  
Preoperative  Enoxaparin 30 mg subcutaneous at 2200  
(if surgery delayed until next day)  
Postoperative  Enoxaparin 40 mg subcutaneous daily  
Patients at high risk of bleed should receive  
properly-fitted bilateral calf-length TEDS  | 1<sup>st</sup> dose at 0830 on postoperative day 1 and continue daily  | 14 – 28 days total  
(depending on risk level) |
| General Surgery (major) |  
Preoperative  No prophylaxis  
Postoperative  Enoxaparin 40 mg subcutaneous daily  
Patients at high risk of bleed should receive  
properly-fitted bilateral calf-length TEDS  | 1<sup>st</sup> dose starting postoperative day 1  | Until discharge |
| Urology       | Low Risk  
Early and frequent ambulation  
Open Procedures (Routine prophylaxis recommended)  
Moderate/High Risk  
Enoxaparin 40 mg subcutaneous daily  
Moderate/High Risk AND High Bleed Risk  
Use SCD’s (sequential compression devices)  
Very High Risk  
Enoxaparin 40 mg subcutaneous daily plus SCD  
Very High Risk and High Bleed Risk  
SCD started prior to surgery and enoxaparin 40 mg when bleed risk decreased.  | Initiation of Enoxaparin  
One dose on day of surgery at 2200 and daily at 2200.  
Initiate on Post Op Day 1 after surgery if bleeding concerns or if starting SCD preoperatively  | Until discharge |
| Obstetrics/Gynaecology |  
Postoperative TAH  
Enoxaparin 40 mg subcutaneous daily  
Patients at high risk of bleed should receive  
properly-fitted bilateral calf-length TEDS  
Postnatal - High risk (previous VTE) -  
Enoxaparin 40 mg subcutaneous daily  | 1<sup>st</sup> dose starting postoperative day 1  | In hospital prophylaxis with enoxaparin  
At least six weeks |
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<tbody>
<tr>
<td>High bleed risk</td>
<td>Properly Fitted Bilateral calf-length TEDS used continuously (except for bathing)</td>
<td>ASAP after emergency admission Just prior to surgery for elective surgery procedures</td>
<td>Until bleeding risk allows the use of LMWH</td>
</tr>
<tr>
<td>Heparin-Induced Thrombocytopenia (current or previous)</td>
<td>Consult haematology No heparin or LMWH Fondaparinux 2.5 mg subcutaneous daily</td>
<td>1st dosing time after admission if possible</td>
<td>Until discharge</td>
</tr>
</tbody>
</table>

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<tr>
<th>Special Population</th>
<th>Dosage Regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight greater than 100 kg</td>
<td>Enoxaparin 60 mg subcutaneous daily</td>
</tr>
<tr>
<td>Weight less than 40 kg</td>
<td>Enoxaparin 30 mg subcutaneous daily</td>
</tr>
<tr>
<td>Renal Dysfunction CrCl 15 - 30 mL / min</td>
<td>Enoxaparin 30 mg subcutaneous daily (consider 40 mg if patient greater than 100 kg)</td>
</tr>
<tr>
<td>CrCl less than 15 mL / min</td>
<td>Heparin 5000 units subcutaneous q.12h or q.8h (higher risk patients)</td>
</tr>
</tbody>
</table>

### Timing of Enoxaparin Around Epidurals and Procedures

**Epidural Management with Enoxaparin**

**Preoperative Enoxaparin – Epidurals**

For patients on preoperative enoxaparin thromboprophylaxis, needle placement should occur at least 10-12 hours after the last enoxaparin dose.

For patients who receive enoxaparin two hours preoperatively, neuraxial techniques should not be employed as needle placement would occur during peak anticoagulant activity.

**Post Operative Enoxaparin - Epidurals**

The first dose of enoxaparin should be administered six to eight hours postoperatively (the second postoperative dose should occur no sooner than 24 hours after the first dose).

No enoxaparin should be given for at least two hours following the removal of any neuraxial catheter.

No enoxaparin should be given for 6-8 hours following the insertion of any neuraxial catheter, epidural/spinal injection, attempted epidural procedure or lumbar puncture.

10-12 hours should elapse between the previous dose of enoxaparin and the insertion or removal of an epidural or other neuraxial catheter.

**Procedure Management with Enoxaparin**

For most surgeries (exception: urology), the first dose of anticoagulant prophylaxis will be started the morning after surgery (post operative Day 1).

Enoxaparin does not need to be held for most procedures (e.g. PICC insertions, bronchoscopies). MRP should be consulted on a case-by-case basis.

October 2011