

Following joint replacement surgery there is an increased risk of developing venous thromboembolism (VTE) for all patients. This risk is further increased in certain patients. VTE prophylaxis must therefore be prescribed for all patients undergoing joint replacement.

The choice of regimen is based on the risk of developing a VTE or contraindications to therapy with aspirin.

**For patients receiving pre-existing anticoagulation therapy please select “Option 3”.**

CHECKLIST 1: Permanent risk factors for VTE . If ANY risk factors present please select prophylaxis “Option 2”. Tick all risk factors present:	
Previous VTE (deep vein thrombosis or pulmonary embolism)	
VTE in 1 <sup>st</sup> degree relative (parent, sibling, children)	
Obesity (BMI >30) Weight_____ Height_____	
Active cancer (on treatment or the under care of Oncology/Haematology)	
Significant comorbidities: 1.Cardiac failure 2.Respiratory conditions (COPD/ asthma/ bronchiectasis/ pulmonary hypertension) 3.Inflammatory bowel disease 4.Diabetes on treatment 5.Rheumatoid inflammatory/ connective tissue disorders 6.Pro-thrombotic haematological disorders (polycythaemia /essential thrombocytosis / myeloproliferative disorders)	
Oestrogen treatment including combined contraceptive pill; HRT; or tamoxifen	
Significant varicose veins	
Pregnant or within 6 weeks of childbirth or miscarriage	
Any recent hospital admission or major surgery within 6 weeks	
Known thrombophilia (Antiphospholipid syndrome, Factor V Leiden, Protein C/S/Antithrombin deficiency)	

# VTE risk assessment & prophylaxis in Total Knee Replacement (Adults)

<b>CHECKLIST 2: Contraindications (Tick all contraindications present)</b>	
<b>Contraindications to aspirin prophylaxis:</b> If contraindications present please select prophylaxis "Option 2"	
Allergy to aspirin	
Previous significant bleed (Gastrointestinal / urogenital / soft tissue) on aspirin/ NSAIDs	
<b>Contraindications to LMWH prophylaxis:</b> If contraindications present please select prophylaxis "Option 1". If VTE risks are present (see checklist one), please discuss with a Haematologist	
Hypersensitivity to heparin or previous HITS	
Creatinine clearance <15ml/min (consider unfractionated heparin, see appendix 1)	
<b>Contraindications to both LMWH and aspirin prophylaxis:</b> If contraindications consider omitting prophylaxis (discuss with a Haematologist)	
Haemophilia/bleeding disorder	
Thrombocytopenia (plts <75 x 10 <sup>9</sup> /l) - dose adjusted LMWH may be appropriate	
Recent CVA (4 weeks) or severe uncontrolled hypertension	
Recent eye or nervous system surgery/ traumatic injury	
Active peptic ulcer or recent GI bleed	

<b>VTE prophylaxis prescribing options following knee replacement</b>		
<b>Option 1</b>	<b>TED stockings or Intermittent pneumatic compression (IPC) whilst an inpatient</b>	Aspirin 75mg OD for 14 days
<b>Option 2</b>		Weight <50kg: Enoxaparin 20mg OD for 14 days
		Weight 50-100kg: Enoxaparin 40mg OD for 14 days
		Weight 101-150kg: Enoxaparin 40mg BD for 14 days
		Weight >150kg: Enoxaparin 60mg BD for 14 days
		<b>Any deviation from this weight-based dosing must be documented in the pathway post-op notes.</b>
<b>Option 3</b>	Follow bridging advice for patients on established anticoagulation (see BSUH intranet for guidelines/ discuss with Anticoagulation and VTE service).  These patients should receive LWMH at either prophylactic or treatment doses, depending on individual case. <b>No patient on established anticoagulation should receive aspirin prophylaxis</b>	

**Notes to prescriber:** 1. Check FBC and U&E, unless normal in the last 2 months  
 2. Give patient information leaflet: "How to prevent blood clots whilst you are in hospital and after your return home"  
 3. Discuss complex cases with Haematologist/Anticoagulation and VTE Team