Appendix 5 - Venous Thromboembolism (VTE) Risk Assessment and Prophylaxis (Surgical Patients)

All elective and emergency surgical patients (day case and in-patient) need assessment.

Risk assessment below must be completed - tick box if present

A. Surgical patients and patients with trauma, - prophylaxis indicated if:

- Total anaesthetic + surgical time > 90 minutes
- Surgery involves pelvis or lower limb and total + surgical time > 60 minutes
- Hip or knee replacement / hip fracture
- Acute surgical admission with inflammatory intra-abdominal condition
- Significant reduction in mobility expected

Yes ☐ No ☐

B. If any of the VTE risk factors below present - prophylaxis indicated

- Active cancer or cancer treatment, age > 60 years
- Critical care admission with dehydration
- Obesity (BMI > 30 kg/m^2)
- One or more significant medical comorbidities (for example: heart disease; metabolic, endocrine or respiratory pathologies; acute infectious diseases; inflammatory conditions)
- Known thrombophilia's
- Personal history or first-degree relative with a history of VTE
- Use of HRT or oestrogen-containing contraceptive therapy (unless stopped 4/52)
- Varicose veins with phlebitis
- Women pregnant or have given birth within the previous 6 weeks)

Yes ☐ No ☐

C. All Patients at risk of bleeding or who have any of the following:

- Active bleeding
- Acquired bleeding disorders (such as acute liver failure)
- Concurrent use of anticoagulants known to increase risk of bleeding (such as warfarin with INR > 2)
- Uncontrolled systolic hypertension (≥ 230/120 mmHg)
- Untreated inherited bleeding disorders (such as haemophilia or von Willebrand's disease)
- Thrombocytopenia (platelets < 75 x 10^9/L)
- Acute stroke

Yes (go to 4) ☐ No ☐

D. Lumbar puncture/epidural/spinal anaesthesia within previous 4 hours or expected in next 12 hours.

Yes (go to 5) ☐ No ☐

1.	**VTE Assessment completed. Prophylaxis indicated (if A or/and B are present)**	☐
2.	**VTE Assessment completed. No prophylaxis required**	☐
3.	**Local anaesthetic. No prophylaxis required (unless high risk)**	☐
4.	**Clinical decision not to give prophylaxis (risk of bleeding outweighs DVT -discuss with senior staff)**	☐
5.	**VTE Assessment completed – prophylaxis to be given > 4 hours post lumbar puncture/epidural/spinal**	☐

Prophylaxis to be given if indicated is (Enoxaparin) 40mg daily
(Adjust dose according renal function or body weight if necessary)

Further information on prophylaxis can be found in the **Policy for Venous Thromboembolism (VTE) risk assessment and prophylaxis in adult patients admitted to hospital** found on the intranet.

Assessment done by:

Name:_____ Signature:_____ Date: ____/____/_____ Time:___:___
Bleep no: _____

Information leaflet (Reducing the risk of a blood clot) given to patient or carer: ☐ Yes ☐ No

If nurse assessment at pre-assessment must be confirmed by doctor:

Name:_____ Signature:_____ Date: __/____/____Time:___:___

Further information

1. Pre-op elective patients:
    - Advise women to consider stopping oestrogen-containing contraceptives or HRT 4 weeks before surgery.
    - Consider stopping pre-existing antiplatelet therapy 1 week before surgery.
    - Consider involving the multidisciplinary team in the assessment.
2. Reassess risks of VTE and bleeding within 24 hours of admission and whenever clinical situation changes.
3. Do not allow patients to become dehydrated unless clinically indicated.
4. Encourage patients to mobilise as soon as possible.
5. Do not routinely offer pharmacological or mechanical VTE prophylaxis to patients having surgery with local anaesthesia by local infiltration with no limitation of mobility.

Patient-centred care:
- Treatment and care should take into account patients' individual needs and preferences.
- Good communication is essential, supported by evidence-based information, to allow patients to reach informed decisions about their care.
- If the patient agrees, families and carers should have the opportunity to be involved in decisions about treatment and care.

Choice of VTE prophylaxis:
Base the choice of mechanical VTE prophylaxis on clinical condition, surgical procedure and patient preference. Choose any one of:
1. anti-embolism stockings (thigh or knee length)
2. intermittent pneumatic compression devices (thigh or knee length)
3. choice of pharmacological VTE prophylaxis based on local policies, clinical condition (for example renal failure) and patient preference.

Patient Information and/or carers/families:
Before starting VTE prophylaxis, offer verbal and written information on:
- risks and possible consequences of VTE
- importance of VTE prophylaxis and its possible side effects
- correct use of VTE prophylaxis
- how to reduce risk of VTE. (such as keeping well hydrated and, if possible, exercising and becoming more mobile).

Discharge plan
Offer patients and/or their families or carers verbal and written information on the signs and symptoms of deep vein thrombosis and pulmonary embolism.

Patients should not be discharge home with anti-emboli stockings unless medically indicated and documented. (NICE,2007) <u>This must be documented in the patients discharge letter.</u>
Patients wearing anti embolic hosiery following hip or knee replacements usually wear stockings for six weeks following surgery.

Nursing staff must ensure that the patient has adequate support in place at home to comply with care recommendations.
- Ensure that patients understand the benefits of wearing them.
- Understand the need for daily hygiene removal.
- Are able to remove and replace them, or have someone available who will be able to do this for them.
- Know what to look for, such as skin marking, blistering or discolouration, particularly over the heels and bony prominences

Know who to contact if there is a problem. Inform GP that a patient has gone home with VTE prophylaxis. (NICE 2010).