NICE VTE risk assessment recommendation (CG 92 2010)

Regard surgical patients and patients with trauma as being at increased risk of VTE if they meet one or more of the following criteria:
- surgical procedure with a total anesthetic and surgical time of more than 90 minutes
- surgical procedure with a total anesthetic and surgical time of more than 60 minutes if the surgery involves the pelvis or lower limb
- acute surgical admission or intramural-intra-abdominal condition
- expected significant reduction in mobility
- have one or more risk factors shown in Box 1

Risk factors for VTE (Box 1)
- Active cancer or cancer treatment
- Age over 65 years
- Critical care admission
- Dehydration
- Known thrombosis
- Obesity (BMI over 30 kg/m²)
- One or more significant medical comorbidities (such as heart disease, metabolic, endocrine or respiratory pathologies, acute infectious diseases or inflammatory conditions)
- Personal history or a first degree relative with a history of VTE
- Use of hormone replacement therapy
- Use of oestrogen-containing contraceptive therapy
- Various vein with phlebitis.

Risk factors for bleeding (Box 2)
- Active bleeding
- Acquired bleeding disorders (such as coagulopathy, haemorrhage)
- Concurrent use of anticoagulants known to increase the risk of bleeding (such as warfarin with international normalised ratio (INR) higher than 2)
- Episodic/episodic anemia or lumbar puncture expected within the next 12 hours (closed or open) or 18 hours (rivaroxaban)
- Episodic/spatial anemia or lumbar puncture within the previous 6 hours (closed and rivaroxaban)
- Acute stroke
- Thrombocytopenia (platelets less than 75 x 10⁹/l)
- Uncontrolled systolic hypertension (230/120 mmHg or higher)
- Untreated inherited bleeding disorders (such as haemophilia and von Willebrand’s disease)

Supplementary material

Emerg Med J


Venous foot / calf pumps
- Continuously unless mobilising
- Until fully ambulant (usually until discharge)

ELECTIVE KNEE ARTHROPLASTY - PRIMARY & REVISION

Rivaroxaban
- 10mg DAILY

- Surgery completed before 1pm start time
- Surgery completed after 1pm start time following day continues for 14 days post surgery (typically 10 day pack after discharge)
- Consider Transcatheter and 1.5 g local infiltration at wound closure

Venous foot / calf pumps
- Continuously unless mobilising
- Until fully ambulant (usually until discharge)

ELECTIVE HIP ARTHROPLASTY - PRIMARY & REVISION

Rivaroxaban
- 10mg DAILY

- Surgery completed before 1pm start time
- Surgery completed after 1pm start time following day continues for 26 days post surgery (typically 5 day pack after discharge)

Venous foot / calf pumps
- Continuously unless mobilising
- Until fully ambulant (usually until discharge)

FRACTURE NECK OF FEMUR

Enoxaparin
- 40mg DAILY

- Post admission and continued for 28 days, depending on bleeding risk

Venous foot / calf pumps
- Continuously unless mobilising
- Until fully ambulant (usually until discharge)

ELECTIVE UPPER LIMB SURGERY & ISOLATED UPPER LIMB TRAUMA

Minor surgical procedures not requiring general anaesthesia.

- Carp tunnel release, minor Dupuytren releases.
- Trigger finger release, joint injection
- Risk assessment not required and prophylaxis not required.

Other upper limb surgery patients

- Patient risk assessed at pre op / on admission (see Risk assessment recommendation, Box 1 and 2) for most upper limb procedures no standard prophylaxis is required as long as the patient remains mobile with no significant risk factors present (e.g. post-history of VTE).

If a patient is assessed to be at intermediate or high risk of VTE consider combined VTE prophylaxis with mechanical and pharmacological methods.

Enoxaparin
- 40mg DAILY

- Initially for 10 days post intervention and reviewed to assess necessity to continue

Venous foot / calf pumps
- Continuously unless mobilising
- Until fully ambulant (usually until discharge)

ELECTIVE MINOR / INTERMEDIATE LOWER LIMB SURGERY / FOOT AND ANKLE SURGERY & LOWER LIMB TRAUMA

- Other than hip replacement, knee replacement or hip fracture surgery
- Patient risk assessed at pre op / on admission (see Risk assessment recommendation, Box 1 and 2) for minimal risk and moderate risk surgery.
- After consultation with the patient
- Consider combined VTE prophylaxis with mechanical and pharmacological methods to patients having orthopaedic surgery until patients mobility no longer significantly reduced.
- For femur and proximal tibia fractures this would normally be for 28 days.

Enoxaparin
- 40mg DAILY

- Continued until the patient no longer has significantly reduced mobility (25% or more Bar 10 weeks consult with haematologist).

Venous foot / calf pumps
- Continuously unless mobilising
- Until mobile and then continued dependent on risk assessment

Note:
- The dose of Enoxaparin must be increased to 40mg twice a day for patients with body mass greater than 105kg
- The dose of Enoxaparin must be reduced to 20mg daily for patients with body mass greater than 70kg
- The dose of Enoxaparin must be reduced to 20mg daily for patients with severe renal impairment to 20mg DAILY for prophylaxis, e.g. GFR is <30ml/min.

Eur J Med 1