## VTE Guidelines

#### Thrombosis Risk Factors

- Active cancer or cancer treatment
- Age over 60 years
- Dehydration
- Known thrombophilias
- Obesity (body mass index [BMI] over 30 kg/m²)
- One or more significant medical co-morbidities (for example: heart disease; metabolic, endocrine or respiratory pathologies; acute infectious diseases; inflammatory conditions)
- Personal history or first-degree relative with a history of VTE
- Use of hormone replacement therapy
- Use of oestrogen-containing contraceptive therapy
- Varicose veins with phlebitis
- Pregnancy or < 6 weeks post partum</li>

# National or locally created risk assessment tool should be utilised, e.g. NICE

#### NICE Risk assessment tool for venous thromboembolism

For those patients undergoing surgery having local or regional anaesthesia without heavy and prolonged sedation may not need to be risk assessed given the low risk

# BSSH recommendations for prophylaxis in hand, wrist and elbow surgery

Risk	Example	Recommendation
Low	LA, regional anaesthesia or <90 minutes GA	No prophylaxis
Moderate	>90 minutes GA (including elbow arthroplasty) and/or 1 risk factor	Mechanical prophylaxis until mobile
High	>90 minutes GA and >1 risk factor, prolonged post-operative immobility or tumour surgery	Mechanical prophylaxis and consider pharmacological prophylaxis until mobile

# NICE guidance for prophylaxis in upper limb orthopaedic surgery

Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism

- 1.11.15 Be aware that VTE prophylaxis is generally not needed if giving local or regional anaesthetic for upper limb surgery. **[2018]**
- 1.11.16 Consider VTE prophylaxis for people undergoing upper limb surgery if the person's total time under general anaesthetic is over 90 minutes or where their operation is likely to make it difficult for them to mobilise. **[2018]**

### **Bleeding Risk Factors**

Due to the increased risks of a localised haemorrhage in the operative field after chemical thromboprophylaxis, some operations will carry a higher risk of failure (a bleed under a graft or a flap may lead to complete loss of the tissue transposed) or complications provoked by anticoagulation in, for example, widespread soft tissue trauma or surgical dissection (compartment syndrome) and bone grafting (significant haemorrhage).

#### Further references

Roberts DC, Warwick DJ. Venous thromboembolism following elbow, wrist and hand surgery: a review of the literature and prophylaxis guidelines. J Hand Surg Eur Vol. 2014; 39(3):306-12