

Venous Thromboembolism (VTE) Prevention and Screening in COVID-19 patients

COVID-19 patients have an approximately 25% risk of VTE (Pulmonary Embolism/PE and Deep Vein Thrombosis/DVT), especially if critically ill or if they have other VTE risk factors

Preventative Blood Thinners



COVID-19 patients in hospital should receive prophylactic heparin therapy (e.g., daily weight based tinzaparin) unless contraindicated.

If contraindicated, pneumatic compression stockings are advised, or fondaparinux for patients with heparin induced thrombocytopenia.

Investigations for DVT/PE



D-dimer elevation is common and nonspecific in COVID-19 patients. Ultrasound or CT should be considered if:

- Patient has symptoms or clinical signs of VTE (e.g., unexplained tachycardia, hypotension, swollen/painful extremity)
- New or worsening hypoxia with normal or unchanged chest x-ray
- Well's criteria* ≥ 2 , **or** D-dimer ≥ 1 mg/l at presentation
- D-dimer > 3 mg/l **and** a Well's criteria ≥ 2 at any time is suggestive of PE; consider empiric anticoagulation if there is testing delay

*DVT: <https://thrombosiscanada.ca/tools/?calc=wellsDVT>

*PE: <https://thrombosiscanada.ca/tools/?calc=wellsPE>

Standard Dosing and Duration of Prophylaxis



Higher than usual VTE prophylaxis doses are not recommended, as new evidence suggests that they increase bleeding risk in critically ill COVID patients without adding much benefit.

Prophylaxis is recommended as per usual practice, until the patient is fully ambulatory or is discharged.
