Anticoagulation Management and 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



Prevention of the need for organ support, ICU-level care and death

In **moderately sick** hospitalized COVID-19 patients on low flow oxygen at low bleeding risk, full dose blood thinners (ie. Tinzaparin 175u/Kg SC daily) may be considered for 14 days or until discharge, to increase the probability of survival until hospital discharge without the need for ICU-level organ support.

For **critically ill** COVID-19 patients with no contraindications to anticoagulation, prevention dose anticoagulation is suggested.

- In patients who have progressed from moderate to critically ill, we suggest continuing full dose blood thinners if started at admission.
- In patients who are transitioned out of ICU to a medical ward, we suggest leaving them on prevention dose blood thinners for the duration of hospitalization.
- Definition of "critically ill": Patients requiring ICU-level organ support (high flow rates of oxygen for breathing support, mechanical ventilation, other machines that support the heart and lungs and or kidneys outside of the body, medications for blood pressure support).



Standard Prophylactic Dosing and Duration

All other patients with COVID-19 infection admitted to hospital who do not meet criteria for full dose blood thinners should be offered prevention dose blood thinners (i.e., Tinzaparin 75u/Kg SC daily) for the duration of the hospitalization, unless contraindicated.

Diagnosis of VTE



While routine testing (in the absence of VTE signs and symptoms) is not recommended, patients with COVID-19 infection are at increased risk of VTE.

- Signs and symptoms suspicious for a blood clot (e.g., unexplained tachycardia, hypotension, swollen/painful extremity, new or worsening hypoxia with normal or unchanged chest X-ray) should be watched for
- D-dimer greater than 2x the ULN is associated with VTE and may be used to further inform clinical pre-test probability and requirement for further testing

For more information, see the full Scientific Advisory Group review

ahs.ca/scientificadvisory



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