

## **Interim clinical guidance: VTE prevention in people with COVID-19 in the community or in residential settings**

There are emerging reports of increased rates of venous thromboembolism (VTE, consisting of deep vein thrombosis DVT and/or pulmonary embolism PE) in patients hospitalised with COVID-19, particularly those with severe disease in critical care. The HSE Covid-19 Interim Clinical Guidance - VTE protocol and patient information for acute hospitals provides guidance in this setting.

There is a lack of evidence or data about the risk of VTE or appropriate prevention in people with COVID 19 in the community or residential settings. This guidance aims to clarify the circumstances under which VTE prevention may be considered in people with COVID-19 and what prevention may be appropriate.

The risk of VTE is not known to be raised in people with mild COVID-19. For clinical reasons and in keeping with the resident's preference, some people in residential settings receive medical treatment there for moderate or severe COVID-19 illness. VTE risk may be increased in this group.

- VTE prophylaxis is not routinely recommended in the community or in residential settings for people who do not have COVID-19.
- VTE prophylaxis is not recommended in the community or in residential settings for people who have asymptomatic or mild COVID-19.
- People with moderate or severe COVID-19 in the community or in residential settings who are transferred to hospital should be risk assessed and receive prophylaxis in hospital.
- Pending the emergence of further evidence and on an interim basis, VTE prophylaxis may be considered in people with significant functional decline from baseline due to COVID-19 who are remaining in a residential setting. The senior clinical decision maker (in most cases the person's GP) may consider whether prophylaxis is appropriate on an individual basis in this population, having regard for the resident's treatment goals and care plan, and the balance of potential benefits and bleeding risks.

### **Reducing the risk of VTE**

Encourage adequate hydration. Encourage movement/mobilising where possible.

Encourage awareness of VTE. Signs and symptoms of deep venous thrombosis, DVT, include pain, swelling, warmth or redness in one leg or calf. Signs and symptoms of pulmonary embolism, PE, include shortness of breath, rapid breathing, chest pain particularly on breathing deeply, coughing or coughing up blood. Immediate action to seek medical help is needed if they occur.

### **Low Molecular Weight Heparin (LMWH)**

LMWH is recommended first line for VTE prophylaxis.

Consider contra-indications or cautions to LMWH prophylaxis:

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The HSE will continue to update this guidance as new information becomes available.

- Do not add LMWH prophylaxis if the person is on therapeutic anticoagulation, e.g. with warfarin (Warfant, Warfarin Teva), apixaban (Eliquis), dabigatran (Pradaxa), rivaroxaban (Xarelto), edoxaban (Lixiana), enoxaparin (e.g. Clexane) or tinzaparin (Innohep). Continue pre-existing therapeutic anticoagulation in this case.
- Do not use LMWH if the person is actively bleeding or known to have a significant bleeding risk, e.g. is known to have a baseline platelet count less than  $50 \times 10^9/L$ , known inherited or acquired bleeding disorder, blood pressure 230 mmHg systolic or 120 mmHg diastolic or greater, or history of heparin-induced thrombocytopenia (HIT).
- Consider if other bleeding risks outweigh the benefits of prophylaxis, e.g. medication such as non-steroidal anti-inflammatory drugs (NSAIDs) or dual antiplatelet therapy.

Ideally refer to a recent FBC and U&Es (within the last 8 weeks), however clinical judgement can be used. If there is a concern about the need for blood monitoring before LMWH is prescribed, samples can be taken on the next working day.

Standard dose: Enoxaparin 40 mg once daily or tinzaparin 4,500 units once daily, by subcutaneous injection, while the person is considered at high risk of VTE, usually for a maximum of 14 days.

Low body weight (less than 50 kg): Consider enoxaparin 20 mg or tinzaparin 3,500 units once daily.

Renal impairment: Consider enoxaparin 20 mg once daily if creatinine clearance 15-30 mL/min. If creatinine clearance less than 15 mL/min, consider mechanical prophylaxis.

### **Mechanical prophylaxis**

If prophylaxis is indicated but LMWH is not appropriate, graduated compression (anti-embolism) stockings may be considered while the person is considered at high risk of VTE, usually for 14 days.

Avoid graduated compression stockings in peripheral arterial disease, severe dermatitis, severe leg oedema or pulmonary oedema from congestive cardiac failure, leg deformity preventing correct fit, peripheral neuropathy, recent skin graft, allergy to fabric or acute stroke. Use caution and clinical judgement if applying stockings over venous ulcers or wounds.

### **References**

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Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism. March 2018 [www.nice.org.uk/guidance/ng89](http://www.nice.org.uk/guidance/ng89)

Rapid Evidence Review: Clinical evidence for thromboprophylaxis in the management of COVID-19. May 7<sup>th</sup> 2020 <http://www.ncpe.ie/featured/latest-updates-from-the-covid-19-evidence-review-group-for-medicines/>

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