OLOLRMC Pharmacy Antithrombotic Stewardship

COVID-19 Antithrombotic management guideline

Epidemiology

Caucasians and African Americans have almost double the risk of VTE compared with Hispanics.

Risk factors

Immobility in COVID -19 patients (limited PPE resources for routine ambulation), obesity, advanced age (>/= 50), recent surgery and trauma, sepsis, pregnancy, cancer

Antithrombotic therapy for non-critically ill, hospitalized patients with COVID-19 with no suspected or confirmed VTE[1]

All hospitalized patients with COVID-19 should receive at least the standard dose thromboprophylaxis with Enoxaparin (LWMH) or Heparin (UFH)[1]

1	For non-critically ill patients hospitalized with COVID-19, prophylactic dose of Enoxaparin (LWMH) or Heparin (UFH) is recommended. **1. Enoxaparin 40 mg SQ daily** **OR** **2. Enoxaparin 30 mg SQ daily for CrCl < 30 ml/min** Morbid Obesity[4] – BMI > 40 kg/m^2 **a. Enoxaparin 40 mg SQ BID** **OR** **b. Enoxaparin 30 mg SQ BID for CrCl < 30 ml/min**
2	In select non-critically ill patients at increased risk of disease progression or thromboembolism and are not high risk for bleeding; consider the use of therapeutic intensity dose of LMWH or UFH
3	**For non-critically ill patients hospitalized with COVID-19, intermediate-dose of LMWH or UFH is not recommended**
4	**For non-critically ill patients hospitalized with COVID-19, add-on treatment with an antiplatelet agent is not recommended**

We do not recommend the routine use of post-hospital thromboprophylaxis therapy after discharge following hospitalization for COVID-19.

Antithrombotic therapy for critically ill, hospitalized patients with COVID-19 with no suspected or confirmed VTE[1]

1	For critically ill patients hospitalized with COVID-19, prophylactic dose of Enoxaparin (LWMH) or Heparin (UFH) is recommended. **1. Enoxaparin 40 mg SQ daily** **OR** **2. Enoxaparin 30 mg SQ daily for CrCl < 30 ml/min** Morbid Obesity[4] – BMI > 40 kg/m^2 **a. Enoxaparin 40 mg SQ BID** **OR** **b. Enoxaparin 30 mg SQ BID for CrCl < 30 ml/min**
2	**In critically ill patients hospitalized with COVID-19, intermediate-dose, or therapeutic dose of LMWH or UFH is not recommended**
3	**In critically ill patients hospitalized with COVID-19, add-on treatment with an antiplatelet agent to prophylactic dose of LMWH or UFH is not recommended**

We do not recommend the routine use of post-hospital thromboprophylaxis therapy after discharge following hospitalization for COVID-19.

Anticoagulation therapy for hospitalized patients with confirmed diagnosis of VTE

Critically Ill with no enteral route	Non-critical ill with enteral route
1. **CrCl > 30 ml/min** a. **Enoxaparin 1 mg/kg SQ BID** **OR** b. **Enoxaparin 1.5 mg/kg SQ daily** 2. **CrCl < 30 ml/min** a. **Enoxaparin 1 mg /kg SQ daily** **For Obese patient (weight > 150 kg)** 1. **CrCl > 30 ml/min** **a. Enoxaparin 150 mg SQ BID** **2. CrCl < 30 ml/min** a. **Enoxaparin 150 mg SQ daily**	**Apixaban** b. Initiate 10 mg PO BID for 7 days c. Followed by 5 mg PO BID d. Hemodialysis: 5 mg PO BID for 7 days; then 2.5 mg PO BID **2. Rivaroxaban** a. Initiate 15 mg PO BID for 21 days b. Followed by 20 mg PO daily c. CrCl < 15 mL/min and HD: avoid use

Monitoring

Anti-factor Xa monitoring on treatment dose will be done automatically by a clinical pharmacist for the following patient populations:

- Obesity (> 150 kg)
- Renal insufficiency (CrCl <30 mL/min).

Using Anti-Factor Xa Monitoring Guideline for Enoxaparin located on formweb

Duration of Therapy

Patients with diagnosis of VTE

1. Treatment dose for minimum of 3 months as recommended for provoked VTE

Patients with no diagnosis of VTE

2. VTE Prophylaxis pharmacotherapy during the course of hospitalization
    a. Consider benefit vs risk for an extended VTE prophylaxis post discharge.

This Guideline Review and Revision information

Last Date Revised: 03/2024

Last Date Reviewed: 03/2024

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