Anticoagulation and VTE Prophylaxis for Hospitalized COVID-19 Patients, Pregnancy Considerations

All hospitalized pregnant COVID-19 + Patients ≥ 18 years old admitted to the hospital should receive DVT prophylaxis unless contraindicated

Sequential Compression Device (SCD) until delivery and low risk of post-partum bleeding

Yes

Is the patient in active labor?

No

Intermediate Risk = High Intensity Thromboembolic Prophylaxis

Recommend if ANY of the following:
• Admitted to an ICU
• High-flow nasal oxygen
• BMI ≥ 40 kg/m² while pregnant
• BMI ≥ 30 kg/m² post-partum
• Rapidly increasing D-dimer
• ECMO

Low Risk = Standard Thromboembolic Prophylaxis

• All patients who do NOT have a clear indication for full dose/therapeutic anticoagulation, AND do not meet criteria for “Intermediate Risk” group

High Risk = Therapeutic Anticoagulation

Recommends if ANY of the following:
• Continuation of home therapy
• Evidence of new DVT or PE
• High clinical suspicion for DVT/PE, but objective evidence cannot be obtained

Consider if ANY of the following:
• Renal failure on RRT with repetitive clotting of circuit (2 circuits in 24 hours)
• Persistently elevated D-dimer without clinical improvement

For pts with CrCl ≥ 30mL/min:
Enoxaparin 40mg Qday
No monitoring necessary

For CrCl <30 mL/min and no IHD:
Enoxaparin 30mg Qday
Monitoring: Anti-Xa, goal peak 0.2-0.5 IU/mL
Wt >160 kg: Consider therapeutic enoxaparin vs UFH infusion
Monitoring: hPTT 60-80 sec if UFH infusion

For CrCl <30 mL/min WITH IHD:
UFH 5000 units q 8 hrs
No monitoring necessary

Post Discharge:
Consider ASA 81mg or prophylactic dose LMWH for 14 days if post-partum

ECMO: Per CVICU routine

For CrCl ≥ 30mL/min:
Enoxaparin 0.5mg/kg BID
(min dose 40 BID, max dose 80 BID)
Consider Monitoring: Anti-Xa, goal peak 0.2-0.5 IU/mL
Wt >160 kg: Consider therapeutic enoxaparin vs UFH infusion
Monitoring: hPTT 60-80 sec if UFH infusion

For CrCl <30 mL/min and no IHD:
BMI ≤ 40: Enoxaparin 30mg Qday
BMI > 40: Enoxaparin 40mg Qday
Monitoring: Anti-Xa, goal peak 0.2-0.5 IU/mL

For CrCl <30 mL/min WITH IHD:
BMI ≤ 40: UFH 5000 units q 8 hrs
BMI > 40 or Wt >100kg: 7500 units q 8 hrs
No monitoring necessary

Consider ASA 81mg daily for all patients in this category if bleeding risk low

For pts with CrCl ≥ 30mL/min:
Enoxaparin 1 mg/kg BID
(max dose 180 BID)
Monitoring: Anti-Xa, goal peak 0.6-1.2 IU/mL

For CrCl <30 mL/min WITH IHD:
BMI ≤ 40:
UFH 5000 units q 8 hrs
BMI > 40 or Wt >100kg: 7500 units q 8 hrs
No monitoring necessary

Post Discharge:
Considers ASA 81mg daily for all patients in this category if bleeding risk low

Recommendations for monitoring

Admission labs:
• See ID work-up guidance algorithm
• D-dimer

Ongoing surveillance if in Intermediate or High Risk group or change in clinical status:
• D-dimer every 48 hours until down trending
• Daily CBC and platelet count, if plt <100, evaluate for DIC (fibrinogen, PT, aPTT) and modify intensity if sx of bleeding

*For patients being discharged on DOAC or LMWH, will need to f/u with discharge pharmacy and med-access teams
If patient is un-insured, consider ASA 325 mg vs coupon card for DOAC

UFH = Unfractionated Heparin
LMWH = Low Molecular Weight Heparin
DOAC = Direct Acting Oral Anticoagulant
VTE = Venous Thromboembolism
IHD = Intermittent Hemodialysis