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6-2020

### Children's Mercy COVID-19 venous thromboembolism (VTE) prophylactic guidelines

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These guidelines do not establish a standard of care to be followed in every case. It is recognized that each case is different and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare guidelines for each. Accordingly, these guidelines should guide care with the understanding that departures from them may be required at times.

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## Children's Mercy COVID-19 Venous Thromboembolism (VTE) Prophylactic Guidelines\*

**Finalized: 6/30/20**

**Owner: L. Amos, MD**

Indications for pharmacologic VTE prophylaxis:

COVID-19 PCR positivity or high concern for COVID-19 despite negative test

**PLUS** one or more of the following risk factors:

1. Patients admitted to the Intensive Care Unit
2. Patients admitted with a diagnosis of Multisystem Inflammatory Syndrome in Children (MIS-C)
3. Patients with VTE risk factors:
  - a. History of previous thrombosis
  - b. Central venous catheter
  - c. Personal or family history of thrombophilia
  - d. Immobility
  - e. Medical diagnosis with increased VTE risk (such as, but not limited to, sickle cell disease, active malignancy, autoimmune disorders, inflammatory bowel disease, nephrotic syndrome)
  - f. Obesity
  - g. Medications (PEG-asparaginase, estrogen containing therapy)
4. Elevated D dimer > 2 times the upper limit of normal
5. Evidence of significant inflammation (elevated CRP, ESR, fibrinogen)

If patients meet above criteria, please consult the Inpatient Coagulation Consult Service for anticoagulation prophylaxis recommendations:

1. Patients who are already on anticoagulation at prophylaxis or treatment dosing and are clinically stable should continue current regimen
  2. For clinically stable patients:
    - a. Lovenox at prophylactic dosing per the Clinical Practice Guidelines (CPG) as found on scope with goal LMWH prophylactic range of 0.1-0.3 units/mL
- OR
- b. Rivaroxaban 10 mg po daily may be considered in some adolescent patients in consultation with the Coagulation Consult Service
  3. For clinically unstable patients:
    - a. Heparin at 10-15 units/kg/hr without a loading dose with goal prophylactic standard heparin level of 0.1-0.3 units/mL

OR



- b. Bivalirudin if renal function adequate at 0.1 mg/kg/hr with goal HPTT of 40-60 seconds

Use of anti-platelet therapy such as aspirin in conjunction with pharmacologic therapy should be a multi-disciplinary discussion involving the primary service, Cardiology, Infectious Disease, Rheumatology, and Hematology

Patients at very high risk for VTE may be increased to therapeutic dosing ranges as per the discretion of the Coagulation Service

Duration of anticoagulation prophylaxis typically will be until hospital discharge but may be extended at the discretion of the Coagulation Service

\*Guidelines adapted from Texas Children's Hospital COVID-19 and VTE Prophylaxis Recommendations