VTE Prophylaxis Guidelines for Inpatient Obstetrics

Antepartum Hospitalized Patient

- All patients should receive SCDs.
  - Patient declination must be documented (recommend chemoprophylaxis as alternative)
- Continue current chemoprophylaxis if previously receiving prophylactic or therapeutic dosing.
- Add prophylactic anticoagulation if:
  - Personal history of VTE not on anticoagulation
  - Low risk[1] thrombophilia
  - Consider if anticipated inpatient stay >72 hours

Postpartum Hospitalized Patient

- Cesarean Delivery
  - All patients receive SCDs placed prior to delivery and continue until fully ambulatory.
  - Continue any antepartum prophylactic or full anticoagulation.
  - Add prophylactic chemotherapy for 6 weeks postpartum if:
    - Personal history VTE not on anticoagulation
    - Personal history of thrombophilia (low risk or high risk[2]) regardless of family history
- Vaginal Delivery
  - Continue any antepartum prophylactic or full anticoagulation.
  - Add prophylactic chemotherapy for 6 weeks postpartum if:
    - Low risk thrombophilia with family history of VTE (first degree relative)
    - Low risk thrombophilia without family history of VTE with the presence of 1 or more additional risk factors[3]

- Personal history of VTE not on anticoagulation

Low risk thrombophilia: Factor V Leiden heterozygous, prothrombin G20210A heterozygous, protein C or S deficiency, antiphospholipid antibody

High risk thrombophilia: Factor V Leiden homozygous, prothrombin G20210A homozygous, heterozygous for Factor V Leiden and prothrombin G20210A mutation, or antithrombin deficiency

Risk factors: Age >39, BMI >30kg/m^2, medical comorbidities (cancer, heart failure, active SLE, IBD, nephrotic syndrome, T1DM with nephropathy, sickle cell disease, current IVDU), current smoker, immobility (paraplegia), pregnancy complications (multiple pregnancy, FGR, HTN), peripartum hemorrhage >1000mL, hysterectomy, general anesthesia, postpartum infection

Prophylactic Anticoagulation	
Enoxaparin	Unfractionated Heparin
<100 kg 40mg daily ≥100kg 60mg daily	1st trimester 5000u q 12 hours 2nd trimester 7500u q 12 hours or 5000u q 8 hours 3rd trimester 10,000 q 12 hours or 5000u q 8 hours

*VTE prophylaxis should be held ≥ 12 hours before scheduled induction and may be resumed 6 hours after vaginal delivery or 12 hours after caesarian delivery. Also refer to "Management of Thromboembolic Disease in Pregnancy" for recommended hold times for patients undergoing neuraxial anesthesia.

** Contraindications to pharmacologic prophylaxis: Platelets < 75 x 10^9/L, active bleed, scheduled high bleed risk surgery, planned epidural placement and removal, planned lumbar puncture, intracranial or spinal bleeding within last 48 hours- **Use SCDs only for this population**

*** For patients with CrCl <30ml/min or dialysis: use unfractionated heparin dosing above

References:

1. Society for Maternal-Fetal Medicine Consult series #51: Thromboembolism prophylaxis for cesarean delivery. Am J Obstet Gynecol. 2020 Aug; 223 (2):B11-17.
2. ACOG practice bulletin no. 196: thromboembolism in pregnancy. Obstet Gynecol. 2018; 132: e1-e17
3. Reducing the risk of venous thromboembolism during pregnancy and the puerperium (Green-top Guideline no.37a). Date accessed: 03/26/2023.
4. Bistervels IM, et al. Intermediate-dose versus low-dose low-molecular-weight-heparin in pregnant and post-partum women with a history of venous thromboembolism (Highlow study): an open-label, multicentre, randomized, controlled trial. Lancet. 2022 Nov 19; 400 (10365):1777-1787.

Revised 02.20.24 JJ