

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
 - o Low risk¹ 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 risk²) 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 factors³

 Personal history of VTE not on anticoagulation with the presence of 1 or more additional risk factors

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/m², 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
	1 st trimester 5000u q 12 hours
<100 kg 40mg daily	2 nd trimester 7500u q 12 hours or
	5000u q 8 hours
≥100kg 60mg daily	3 rd 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 < 75×10^9 /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:

- 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.

These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.

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