RISK ASSESSMENT & TREATMENT GUIDE FOR OBSTETRIC THROMBOPROPHYLAXIS

DEFINITIONS

High-Risk Thrombophilias	• Factor V Leiden Homozygote • Factor II Homozygote (= Prothrombin =G20210A) • Factor V Heterozygote with Factor II Heterozygote Combination • Antithrombin III Deficiency
Low-Risk Thrombophilias	• Protien C Deficiency • Protien S Deficiency • Factor V Leiden Heterozygote • Factor II Heterozygote

WORKUP

WHEN TO TEST	LABORATORY EVALUATION
History of unprovoked VTE 1st Degree relative with history of high-risk thrombophilia	**Full Thrombophilia Panel:** • Protein C & S deficiencies • Factor V Leiden • Prothrombin G20210A • Anticardiolipin • Lupus Anticoagulant • Anti-beta 2 glycoprotein
One or more IUFD or SAB after10wga One or more preterm births due to condition associated with placental insufficiency (eclampsia/severe pre-e) Three or more unexplained SAB before 10wga	**Acquired Thrombophilia Panel:** • Anticardiolipin • Lupus anticoagulant • Anti-beta 2 glycoprotein

TREATMENT

HIGH RISK CATEGORIES

ANTEPARTUM		POSTPARTUM
Treat Throughout Entire Pregnancy		**Treat Total 6 Weeks Postpartum**
High-risk thrombophilia without history of VTE History of unprovoked VTE History of VTE caused by pregnancy or high estrogen state Antiphospholipid syndrome with prioradverse pregnancy outcome Low-risk thrombophilia with history of VTE	Prophylactic Dose	High-risk thrombophilia without history of VTE History of unprovoked VTE History of VTE caused by pregnancy or high estrogen state Antiphospholipid Syndrome without history of VTE, with previous adverse pregnancy outcome Low-risk thrombophilia with history of VTE
Long term anticoagulation before pregnancy Mechanical heart valve High-risk thrombophilia with history of VTE History of >2 VTE not already on treatment Antiphospholipid Syndrome with history of VTE	Therapeutic Dose	High-risk thrombophilia with history of VTE History of >2 VTE not already on treatment Antiphospholipid Syndrome with history of VTE
	Return to previous therapy	Long term anticoagulation before pregnancy Mechanical heart valve

INTERMEDIATE RISK CATEGORIES

Starting at 28 weeks gestational age		**For 10 days postpartum**
Sickle cell disease Maternal heart disease Active lupus flare Active inflammatory polyarthropathy Active inflammatory bowel disease Uncontrolled nephrotic syndrome Type 1 diabetes mellitus with nephropathy	Prophylactic Dose	Sickle cell disease Maternal heart disease Active lupus flare Postpartum transfusion Immobilization/bedrest for >7 days per expert opinion

LOW RISK CATEGORIES

If ≥ 4 factors = prophylactic treatment throughout pregnancy **If 3 factors = prophylactic dosage starting at 28 weeks gestational age** **If < 3 factors = close surveillance**	**If ≥ 4 factors = prophylactic dosage for 6 weeks postpartum** **If 3 factors = prophylactic dosage for 10 days postpartum** **If < 3 factors = close surveillance**
☐ Low risk thrombophilia without history of VTE ☐ History of provoked VTE (i.e. long car ride, surgery) ☐ 1st degree relative with history of estrogen-provoked VTE ☐ Active smoker > 10 cigarettes/day ☐ Age > 35 years old at expected delivery date ☐ BMI > 40 pre-pregnancy ☐ Active pre-eclampsia, mild or severe ☐ Multiple gestation pregnancy ☐ Immobility/strict bed rest for >7 days	Low-risk thrombophilia without history of VTE ☐ History of provoked VTE (i.e. long car ride, surgery) ☐ 1st degree relative with history of estrogen-provoked VTE ☐ Active smoker >10 cigarettes/day ☐ Age >35 years old at delivery date ☐ BMI > 40 pre-pregnancy ☐ Cesarean delivery ☐ Postpartum hemorrhage (>1L of blood loss) ☐ Active infection ☐ Pre-eclampsia in this pregnancy, mild or severe ☐ Multiple gestation pregnancy ☐

DOSAGE GUIDES

Therapeutic dosing	LMWH: Enoxaparin 1mg/kg SC q12h UFH: IV dose of 5,000 IU loading, then follow protocol and aPTT levels		
Prophylactic dosing	LMWH	50-90kg	40mg SC daily
		<50kg	20mg SC daily
		>90kg	40mg SC q12h
	UFH	First trimester	5,000 BID
		Second trimester	7,500 BID
		Third trimester	10,000 BID

UNIQUE CASES

Ovarian hyperstimulation syndrome	Therapeutic dosage from onset to 12 weeks gestation only
Acute VTE in this pregnancy	Therapeutic dosage until at least 6 weeks postpartum, for a total of 6 months from diagnosis
Surgery during pregnancy (i.e. appenectomy)	Prophylactic dosage while inpatient during hospital stay
Cardiomyopathy or maternal cancer	Prophylactic dosing at conception if pre-existing conditions or at time of diagnosis during pregnancy and continue through 6 weeks partpartum
Mechanical heart valve	Maintain Coumadin if <= 5mg throughout; convert to therapeutic LMWK 1wk prior to delivery