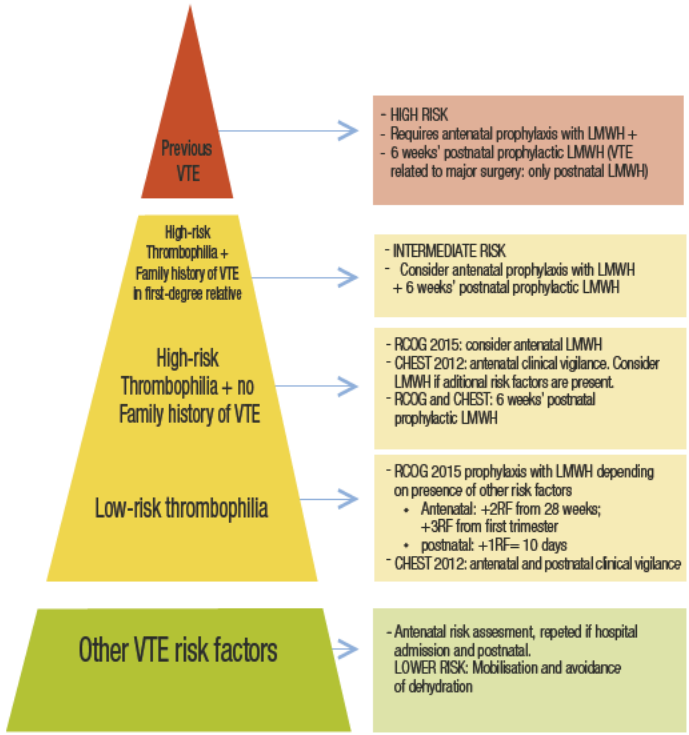
- Active antenatal or postpartum bleeding
- Woman considered at increased risk of major haemorrhage (e.g. placenta praevia)
- Known bleeding disorder (e.g. haemophilia, von Willebrand's disease or acquired coagulopathy)
- Thrombocytopenia (platelet count < 75.000)
- Severe renal disease (glomerular filtration rate [GFR] < 30 ml/minute/1.73m2)
- Severe liver disease (prothrombin time above normal range or oesophageal varices)
- Uncontrolled hypertension (blood pressure > 200 mmHg systolic or > 120 mmHg diastolic)

LMWH with bleeding or dynamic	• Discontinue LMWH
LMWH at therapeutic dose	• LRA after > 24 hours from the last dose
LMWH at prophylactic dose Unfractionated Heparin (UNH)	• LRA after > 12 hours from the last dose • Discontinue UFH 4-6 hours before or Protamine Sulphate
Restart LMWH after birth	• > 12-24 hours postpartum and at least 6 hours after removing the catheter, in abcense of bleeding or risk of bleeding.
ASA low dose	• Consider discontinue 24 hours before

Weight (Kg)	Enoxaparin (Clexane®)	Bemiparin (Hibor®)
< 50	20 mg / 24 h	2500 U / 24 h
50 - 90	40 mg / 24 h	3500 U / 24 h
91- 130	60 mg / 24 h or 40 mg / 12 h	5000 U / 24 h
Intermediate dose (50-90 Kg)	40 mg / 12 h or 60 mg /24 h	Dosages every 12 hours are not included in Technical sheet.
Therapeutic dose	1 mg/kg / 12 h or 1,5mg / 24 h	115 U/kg / 24 h



ABBREVIATIONS

aPL: Antiphospholipid antibodies
APS: Antiphospholipid Syndrome
ARL: Local regional anaesthesia
ASA: Acetylsalicylic Acid
AT: Antithrombin
AVK: Vitamin K antagonists
BMI: Body mass index APS: Antiphospholipid Syndrome
FII: Factor II of the prothrombin G20210A
FVL: Factor V Leiden
IUGR: Intrauterine growth retardation
LMWH: Low molecular weight heparins
PTE: Pulmonary thromboembolism
RM: Recurrent Miscarriage
RF: Risk factors
UFH: Unfractionated heparin
VTE: Venous Thromboembolis

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Scenarios for thromboprophylaxis in pregnancy and puerperium

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CHEST 2012 and RCOG 2015

- Type of thrombophilia
- Personal or family history of VTE
- History of gestational vascular complications
- Antenatal and postnatal risk factors

VTE appearing before the age of 50, idiopathic or recurrent
VTE of atypical location
Gestational vascular complications (RM, late foetal loss, pre-eclampsia, IUGR)*
Family history of first-degree relatives (parents and siblings)

*Request only antiphospholipids antibodies (lupus anticoagulant, anti-cardiolipin and anti-ß2-glycoprotein 1)

IDIOPATHIC	• Recurrent foetal loss or late foetal loss	• There is no cientific evidence. Individual assestement • Therapeutic abstinence or • Empririca l treatment (ASA/LMWH/ASA+LMWH)
IDIOPATHIC	• History of pre-eclampsia or high risk of pre-eclampsia	• ASA all pregnancy, starting in second trimester • Prophylactic LMWH if additional RF
IDIOPATHIC	• IUGR	• Strict ECO-Doppler survillance
THROMBOPHILIA	• Inherited	• Individualized management according to type of thrombophilia, personal or family history of VTE disease and risk factors
THROMBOPHILIA	• Acquired (Obstetric APS)	ASA antenatal + LMWH LMWH postpartum 4-6 weeks

aPL: without clinical symptoms		Abstinence/strict control or ASA
OBSTETRIC APS	Recurrent miscarriage (<10th week of gestation)	ASA* preconception ASA* + Prophylactic LMWH antenatal
OBSTETRIC APS	Late foetal losses, IUGR, pre-eclampsia	
APS with THROMBOSIS	Previous arterial thrombosis	ASA* + Prophylactic LMWH
APS with THROMBOSIS	Previous venous thrombosis	Patients with oral anticoagulants, change to LMWH before 6th week of gestation. ASA* + Prophylactic or Therapeutic LMWH
Puerperium of APS		Prophylactic LMWH 4-6 weeks postpartum. Women receiving long-term vitamin K antagonist before pregnancy: resumption of VKA postpartum Long term ASA*? (controversy)
Individual management, according to clinical and immunological status. Active participation of the patient in the therapeutic strategic decision. Multidisciplinary control by experts in APS.		

*ASA at low dose

HIGH RISK	- Recurrent VTE - Patient with AVK - AT deficiency and APS	- Discontinue oral anticoagulant - LMWH therapeutic doses all pregnancy - Control by expert in thrombosis and pregnancy
HIGH RISK	- Any previous VTE except a single event related to major surgery	- LMWH prophylactic doses all pregnancy - Control by expert in thrombosis and pregnancy
HIGH RISK	- High risk thrombophilia without previous VTE with family history of unprovoked VTE (FVL or FII homozygotes, AT, PS or PC deficiency)	- LMWH prophylactic doses all pregnancy
INTERMEDIATE RISK	- High risk thrombophilia without previous VTE nor family history of VTE (FVL or FII homozygotes, PS or PC deficiency)	- According to RCOG 2015: consider LMWH all pregnancy
INTERMEDIATE RISK		- **According to CHEST 2012:** Antenatal surveillance. Assess additional risk factors.
INTERMEDIATE RISK	- Hospital admission - Single previous episode related to major surgery. - Medical comorbidities (cancer, heart failure, active SLE, IBD or inflammatory polyarthropathy, nephrotic syndrome, type 1 DM with nephropathy, sickle ce l disease, current IVDU) - Any surgical procedure in the pregnancy (e.g. appendicectomy) - Ovarian hyper-stimulation syndrome (OHSS) (first trimester only)	- Consider antenatal prophylaxis with LMWH
LOW RISK	- Obesity (BMI > 30 Kg/m2) - Age > 35 - Parity ≥ 3 - Smoker (> 10 cig/day) - Gross varicose veins - Current pre-eclampsia - Immobility (≥ 3 days) - Family history of unprovoked or estrogenic-provoked VTE in first degree relative - Low risk thrombophilia (FVL or FII heterozygotes) - Multiple pregnancy - IVF/ART	- ≥ 4 risk factors: consider prophylaxis with LMWH all pregnancy
LOW RISK		- 3 risk factors: consider prophylaxis w th LMWH from week 28
LOW RISK		- Less than 2 risk factors: mobilization and avoidance of dehydration
LOW RISK	- Transient risk factors: dehydration/hyperemesis, current systemic infection, long-term travels (>4 hours)	- Consider prophylaxis with LMWH while the risk situation persists and according to other additional risk factors.

- Treatment must begin with the clinical suspicion
- Full anticoagulation with adjusted-doses of LMWH for at least 3 months from the episode, maintaining the treatment all pregnancy and up to 6 weeks postpartum

HIGH RISK	
- Any previous VTE - Anyone requiring antenatal LMWH - High-risk thrombophilia (FVL or FII homozygotes, AT, PS or PC deficiency)	- Postnatal LMWH prophylaxis at least 6 weeks - Patients with oral anticoagulants before pregnancy, consult haematology to restart oral therapy - Compression stockings
INTERMEDIATE RISK	
- BMI >40 Kg/m2 - Readmission or prolonged admission (≥3 days) in the puerperium - Any surgical procedure in the puerperium except immediate repair of the perineum. - Medical comorbidities (cancer, heart failure, active SLE, IBD or inflammatory polyarthropathy, nephrotic syndrome, type I DM with nephropathy, sickle cell disease, current IVDU)	- Prophylaxis with LMWH at least 10 days NOTE: in case of persisting the risk situation or > 3 additional risk factors, consider extending thromboprophylaxis.
- Caesarean section in labour	- **According to RCOG 2015:** LMWH at least 10 days - **According to CHEST 2012:** no need of thromboprophylaxis, except associated risk factors.
LOW RISK	
- Obesity (BMI > 30 Kg/m2) - Age > 35 - Parity ≥ 3 - Smoker (> 10 cig/day) - Elective caesarean - Family history of VTE (First-degree relative) - Low risk thrombophi ia (VTE or FII heterozygote) - Gross varicose veins - Current systemic infection - Current pre-eclampsia - Immobi ity (≥ 3 days) - Multiple pregnancy - Stillbirth in current pregnancy - Instrumental delivery - Prolonged labour (>24 hours) - Postpartum haemorrhage >1 litre or blood transfusion	- ≥2 risk factors: consider prophylaxis with LMWH at least 10 days - < 2 risk factors: early mobilization and avoidance of dehydration