

ANTEPARTUM HAEMORRHAGE (APH)

This LOP is developed to guide clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this LOP.

1. AIM

- Minimise fetal and maternal morbidity and mortality associated with APH

2. PATIENT

- Pregnant woman presenting with vaginal bleeding after 20 weeks gestation

3. STAFF

- Medical and midwifery staff

4. EQUIPMENT

- Cardiotocography (CTG) machine
- Hand held fetal heart Doppler
- Speculum
- Light source
- Lubricant
- 16-gauge intravenous (IV) cannula
- Blood collection tubes:
 - One purple - Full Blood Count (FBC), kleihauer
 - One pink – group and hold (G + H)
 - One blue – coagulation studies (coags)
- Ultrasound machine

5. CLINICAL PRACTICE

- Obtain history
- Assess maternal condition including baseline observations
- Resuscitate woman immediately if required:
 - Assess and secure airway, breathing, circulation
 - Activate Clinical Emergency Response System (CERS) as appropriate.
- Assess blood loss and measure appropriately
- Perform abdominal examination
- Assess fetal condition by:
 - auscultating fetal heart at < 25 weeks gestation
 - applying CTG at ≥ 25 weeks
 - continuous electronic fetal heart rate monitoring if in active labour
- Notify midwife in charge along with Registrar/Fellow and consultant as appropriate
- Insert a 16 gauge intravenous cannula (two in the event of massive haemorrhage) and collect FBC, G+H or cross match, coagulation studies according to blood loss, and Kleihauer (only if Rhesus negative)
- Check previous ultrasound reports for placental position. If unknown and woman is stable, request ultrasound to determine placental position, along with fetal growth and well being
- Perform speculum examination to determine source of bleeding and to determine cervical dilatation. Do not perform a digital vaginal examination until placenta praevia is excluded
- Insert indwelling urinary catheter if there is substantial blood loss
- Consider IV fluid replacement
- Perform maternal observations and measurement of blood loss every 15 mins until stable
- Consider administration of corticosteroids between 24 and 34 weeks gestation and preterm birth in the next 7 days is expected

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- Consider immediate delivery if a persistent abnormal red CTG or maternal circulatory compromise
- Prepare for active management of third stage if delivery is imminent
- Notify paediatric team if delivery is imminent
- Administer Anti D to Rh negative woman – 625 IU (or more depending on Kleihauer result) and not already had a dose in the previous six weeks
- Recommend admission for woman if blood loss is heavier than spotting or bleeding is ongoing
- Consider admission for woman under 37 weeks gestation
- Recommend discharge home for woman who has presented with spotting (>37 weeks gestation) after reassuring clinical assessment- if she is no longer bleeding and placenta praevia has been excluded.
- Advise to book follow up care with usual care provider within a week of discharge
- Advise to contact Delivery Suite immediately if vaginal bleeding continues/reoccurs
- Correct/ prevent iron deficiency anaemia by prescribing appropriate iron replacement

6. DOCUMENTATION

- Medical record

7. EDUCATIONAL NOTES

- APH affects 2 - 5% of pregnancies and after 26 weeks gestations it is associated with increased maternal and infant morbidity and perinatal mortality ^{1, 3, 4, 6}
- The kleihauer is not a sensitive test to diagnose abruption, it is well known for false positives, and a cascade of over diagnosis and treatment. Not recommended except to quantify anti D administration
- APH of unknown origin after the first trimester complicates up to 10% of all pregnancies and increases incidence of postpartum haemorrhage (PPH), induction of labour (IOL) and preterm delivery ^{1, 2, 3, 6}
- APH has a heterogeneous pathophysiology and cannot be predicted ⁶
- Common causes of APH include- placenta praevia and placental abruption; less common are uterine rupture and vasa praevia. Other causes include; abnormal placentation or placenta accrete spectrum⁷, infection, vulval or vaginal varices, short cervical length, cervical abnormalities ^{1, 4, 6}
- Research suggests a three to five fold higher than the background risk for preterm delivery in women with at least one episode of APH prior to 34 weeks gestation ^{3, 6}
- The most predictive risk for placental abruption is abruption in a previous pregnancy ⁶

8. RELATED POLICIES / PROCEDURES / CLINICAL PRACTICE LOP

- Fetal Heart Rate Monitoring – Maternity – MoH GL2018/025
- Placenta Previa/Low-lying Placenta
- Preterm Labour – Diagnosis and Management
- RhD Immunoglobulin in Obstetrics
- Postpartum Haemorrhage – Prevention and Management
- Clinical Emergency Response System (CERS) - Management of the Deteriorating patient
- Anaemia and Haemoglobinopathies in Pregnancy

9. RISK RATING

- Medium

ANTEPARTUM HAEMORRHAGE (APH) cont'd

10. COMPREHENSIVE STANDARD

- CC – Comprehensive Care – standard 5

11. REFERENCES

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3. Yeung SW, Tam WH and Cheung RY (2012). The risk of preterm delivery prior to 34 weeks in women presenting with antepartum haemorrhage of unknown origin. Australian and New Zealand Journal of Obstetrics and Gynaecology 52, 2 167-172
4. Fan D, Wu S, Liu L Xia Q, Wang, W Guo, X & Lui Z (2017). Prevalence of antepartum haemorrhage in women with placenta praevia: a systematic review and meta-analysis. Scientific Reports, 7, 40320
5. Bever AM, Pugh S, Kim S, Newman RB, Grobman WA, Chien EK, Wing DA, Li H, Albert PS & Grantz KL(2018). Fetal growth patterns in pregnancies with first-trimester bleeding. Obstetrics & Gynecology. 131(6), 1021 – 1030
6. Antepartum Haemorrhage, RCOG, Green-top Guideline No.63, 1st Edition, Nov. 2011 (reviewed 2014)
7. Placenta Previa and Placenta Accreta: Diagnosis and Management, RCOG, Green-top Guideline No. 27a, 1st Edition, 2001 (reviewed 2018)

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