HEALTH HOLDING
HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Obstetrics and Gynecology		
Document:	Multidisciplinary Policy and Procedure		
Title:	Management of Antepartum Hemorrhage		
Applies To:	All Obstetrics and Gynecology Staff		
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1. PURPOSE:

1.1 To ensure prompt assessment initiation and care of patient with antepartum hemorrhage.

2. DEFINITIONS:

2.1 Is defined as bleeding from or in to the genital tract, occurring from 24 weeks of pregnancy and prior to the birth of the baby. The most important causes of APH are placenta previa and placental abruption, although these are not the most common.

3. POLICY:

3.1 All women over 24 weeks with history of vaginal bleeding (+1 or more) should be admitted to the labor room. No digital vaginal examination is done to rule out placenta previa.

3.2 Cause: Bleeding from the genital tract after 24 weeks gestation may be due to:

- 3.2.1 Placenta Previa.
- 3.2.2 Placenta Abruptio.
- 3.2.3 Local condition of cervix, vaginal and vulva.
- 3.2.4 Undetermined causes.
- 3.2.5 Vasa Previa.
- 3.2.6 Consider other rare lesions e.g. hemorrhoids, silent rupture uterus if patient with previous caesarean.

4. PROCEDURE:

4.1 On admission:

- 4.1.1 Do proper admission assessment as per (P&P admission to L&D).
- 4.1.2 Obtain a detailed history (noting precipitating factors and amount of blood loss), perform a general examination, check vital signs and palpate the abdomen to note areas of uterine tenderness and hypertonicity.
- 4.1.3 Auscultate fetal heart and perform a CTG where appropriate.
- 4.1.4 Check scans report for placental site and repeats it to exclude placental abruption.
- 4.1.5 Perform gentle speculum examination, to exclude local causes.
- 4.1.6 Extract blood for complete blood count (CBC) and group and save serum (Give anti–D if Rheus Negative).
- 4.1.7 Give steroids if gestation is <34. (Refer to P&P of PTL).
- 4.1.8 Administer anti–D if Rheus (D) negative.
- 4.1.9 Inform NICU.
- 4.1.10 Consent for caesarean and even for hysterectomy should be signed by patient and her husband.

4.2 Management of minor antepartum hemorrhage (History of mild APH with minimal blood loss on admission +1).

4.2.1 Transfer from delivery unit to antenatal ward if no signs of major bleeding, or significant uterine tenderness or fetal distress.

4.2.2 If at term consider induction of labor (discuss with physician).

4.3 Management of moderate antepartum hemorrhage: Indicates significant vaginal bleeding or minor bleeding with significant constant uterine tenderness but no signs of imminent maternal shock or fetal distress.

4.3.1 Intravenous line G14 cannula with normal saline (0.9%) and keep the patient fasting and ready for OR if needed at any time.

4.3.2 CBC group and save serum, renal function test and coagulation profile and give Anti–D (if Rheus negative), liver function test.

4.3.3 Fix indwelling urinary catheter for accurate monitoring of urinary output.

4.3.4 Record observation on her chart and measure all blood loss accurately (consider weighing soaked linen) keep all pads for review.

4.3.5 Discuss the case with consultant/ senior registrar.

4.3.6 Delivery should be effected.

4.3.7 If no evidence of placenta previa, the cervix is favorable and there is no fetal distress, induction of labor by amniotomy and oxytocin may be appropriate. Labor often proceeds rapidly in the event of antepartum hemorrhage.

4.3.8 There should be early recourse to caesarean section if blood loss increases or if there are subtle signs of maternal shock e.g. increasing tachycardia or fetal distress.

4.3.9 The patient should be closely monitored on the labor ward until her condition is satisfactory. Observation continued and documented in the chart.

4.4 Management of major antepartum hemorrhage:

4.4.1 It can be defined by blood loss (≥1500ml) and or vital signs:

4.4.1.1 Disturbance of conscious state.

4.4.1.2 Systolic pressure <100mmHg.

4.4.1.3 Pulse >120 beats per minutes.

4.4.1.4 Reduce peripheral perfusion.

4.4.2 Think and act quickly. In particular, commence resuscitation measures of shock, send more help urgently, monitor and investigate.

4.4.2.1 Start and IV infusion and infuse IV fluids.

4.4.2.1.1 Start an IV Infusion (two if the woman is in shock) using a largebore (G16 or largest available) cannula or needle.

4.4.2.1.2 Infuse IV fluids (normal saline or ringer's lactate) at a rate appropriate for the woman's condition.

4.4.2.2 Beware of large concealed abruptions, where the revealed vaginal bleeding may be minimal.

4.4.2.3 In arriving at a diagnosis, remember:

4.4.2.3.1 A hard "woody" uterus is pathognomonic of placental abruption.

4.4.2.3.2 An engage vertex almost excludes a major degree of placenta previa.

4.4.2.4 Always inform consultant on call as early as possible to discuss the management.

4.4.2.4.1 If FHR abnormal, scan to exclude placenta previa. If no placenta previa, and in advanced 1st stage, consider ARM and vaginal delivery. Otherwise urgent transfer for caesarean section or EUA.

4.4.3 Management depend on fetal condition, causes of APH, extent of bleeding and gestational age.

4.4.3.1 In case of placenta previa:

4.4.3.1.1 >37 weeks, deliver by caesarean section.

4.4.3.1.2 <34 weeks: give dexamethasone 12mg IM for two doses.

4.4.3.1.3 Further management will depend on extent of blood loss and gestational age.

4.4.3.2 In case of abruption placenta: if >37 weeks, induction of labor if fetal well-being allows or LSCS if not.

4.4.3.2.1 If <34 weeks, give dexamethasone 12mg IM for two doses and monitor closely both fetal and maternal condition.

4.4.3.2.2 If between 34–37 weeks gestation, discuss with physician and paediatrician.

4.4.3.2.3 If viable fetus, do vaginal examination if the cervix is not fully dilated or not nearly fully, deliver by LSCS.

4.4.3.2.4 Nearly fully dilated may be allowed to deliver vaginally if the CTG is good quality and reassuring and patient progress rapidly.

4.4.3.2.5 If the cervix is fully dilated and delivery is imminent, allow spontaneous, vaginal delivery, if not imminent assist with forceps or ventose.

4.4.3.2.6 In the event of fetal death mode of delivery is to be decided by the consultant.

4.4.3.2.7 Induction of labor with very careful observation of maternal condition may be appropriate if the maternal condition is stable and if labor progresses rapidly.

4.4.3.2.8 Even if the fetus is dead immediate caesarean section may be preferable UNLESS the cervix is found to perform an amniotomy.

4.4.3.2.9 A caesarean section may still be necessary unless progress of labor is rapid.

4.4.3.2.10 Decision for a vaginal delivery will be considered with an overall view of the patient's clinical scenario.

4.4.3.2.11 If there has been an abruption extensive enough to result in fetal death the patient will always require at least 4 units of blood whatever the initial haemoglobin level and this should be given as soon as the cross match is completed.

4.4.4 Clotting studies prothrombin time, partial prothrombin time, fibrinogen degradation product (PT, PTT, and FDP) should be repeated every 4 hours for the first 12 hours.

4.4.5 Further management of fluid replacement will depend on the clinical condition.

4.5 Following delivery:

4.5.1 Recognize increased risk of PPH.

4.5.2 Administer ergometrine 0.5mg IM and commence an infusion of oxytocin 5 units in 500cc normal saline over 4 hours.

4.5.3 Examine placenta for:

4.5.3.1 Completeness.

4.5.3.2 Any area of abruption.

4.5.3.3 Associated pathological features e.g. abnormal degree of calcification.

4.5.3.4 Send for histopathology.

4.5.3.5 CTG.

4.5.3.6 Partogram.

5. MATERIALS AND EQUIPMENT:

N/A

6. RESPONSIBILITIES:

6.1 Physician

6.2 Nurses

6.3 Midwife

7. APPENDICES:

7.1 Principles of Management of Massive APH
7.2 The Principle of the Fluid Replacement and Administration of Blood Products
7.3 General Consent
7.4 Surgical and Medical Interventional Procedure

8. REFERENCES:

8.1 Integrated management of pregnancy & childbirth. Managing Complcations in Pregnancy and Childbirth, section 1–sypmptoms, vaginal bleeding in later pregnancy and labor. A guide for doctors and midwives. WHO/ RHR/ 007, 2003.
8.2 Hoefmeyer GJ, Mohlala BK, (2001). Hypovolemic Shock. Ballieres Best Pract Res Clin Obstet Gyneco/ 15645-662.
8.3 Royal College of Obstetricians and Gynecologist. RCOG Green Top Guidelines: The management of the Ante–partum haemorrhage. Guideline no. 63, 1st edition London: RCOG, November, 2011.
8.4 Guidelines for Obstetrics & Gynecology, Ministry of Health 2013.
8.5 CBAHI Standard 3rd Edition 2016.

9. APPROVALS:

	Name	Title	Signature	Date
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Reviewed by:	Ms. Awatif Hamoud Al - Harbi	IPCD Director		January 12, 2025
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Reviewed by:	Mr. Abdulelah Ayed Al - Mutairi	QM&PS Director		January 13, 2025
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Approved by:	Mr. Fahad Hezam Al - Shammari	Hospital Director		January 22, 2025

Appendix 1:
Principles of Management of Massive APH (blood loss greater than 1000ml and/ or signs of clinical shock)
Personnel required:

- Call experienced midwife (in addition to midwife in charge).
- Call obstetric middle grade and alert physician.
- Call Anesthetic middle grade and alert physician.
- Alert physician clinical hematologist on call.
- Alert blood transfusion laboratory.
- Call porters for delivery of specimens/ blood
- Designate one member of the team to record events, fluids, drugs and vital signs.

Initial management:
Initial management should follow the ABCD pathway.
A and B– assess airways and breathing.
A high concentration of oxygen (10–15 liters/ minutes) via face mask should be administered.
C–evaluate circulation.
Establish two G14 intravenous lines; a 20 ml blood sample should be taken and sent for diagnostic tests, including full blood count and assessment of FMH if RhD–negative, coagulation screen, urea and electrolytes and cross match (4 units).
D–assess the fetus and decide on delivery.
The four pillars of management:

- Communication between all members of the multidisciplinary team.
- Resuscitation (See Appendix 2).
- Monitoring and investigation.
- Arrest bleeding by arranging delivery of the fetus.

Appendix 2:

The Principle of the Fluid Replacement and Administration of Blood Products.

Basic measures for hemorrhage up to 1000ml with no clinical shock:

- Intravenous access (G14 cannula x 1).
- Commence.

Full protocol for massive hemorrhage (blood loss >1000ml or clinical shock):

- Assess airway.
- Assess breathing.
- Evaluate circulation.
- Oxygen by mask at 10–15 liters/ minute.
- Intravenous access (G14 cannula x 2).
- Position left lateral tilt.
- Keep the woman warm using appropriate available measures.
- Transfuse blood as soon as possible.
- Until blood is available, infuse up to 3.5 liters of warmed crystalloid Hartmann's solution (2 liters) and/ or colloid (1– 2 liters) as rapidly as required.
- The best equipment available should be used to achieve rapid warmed infusion of fluids.
- Special blood filters should not be used, as they slow infusions.

Fluid Therapy and blood product transfusion:

Crystalloid	Up to 2 liters Hartmann's solution.
Colloid	Up to 1–2 liters colloid until blood arrives.
Blood	Cross–matched. if cross–matched blood unavailable and the clinical situation is urgent, give uncross–matched groupspecific blood of give O RhD–negative blood consider the use of red-cell salvage if available.
Fresh frozen plasma	4 units of FFP (12–15ml/kg or total 1 liter) (i) For every 6 units of red cells or (ii) If prothrombin time and/ or activated partial thromboplastin time (PT and aPTT) are greater than 1.5 x mean control.
Platelets concentrates	if platelet count <50 x 109/L
Cryoprecipitate	if fibrinogen <1 g/L

With continuing massive hemorrhage and whilst awaiting coagulation studies, up to 4 units of FFP and 10 units of cryoprecipitate (two packs) may be given empirically.

KINGDOM OF SAUDI ARABIA

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Ministry of Health

Hospital: _____ :مستشفى

Region: _____ :المنطقة/المحافظة

Dept./Unit: _____ :القسم/الوحدة

MRN: |_|_|_|_|_|_|_|_|_|_| :رقم الملف الطبي

Name: _____ :الاسم

Nationality: _____ :الجنسية

Age: _____ ☐ سنة Years ☐ شهر Months ☐ يوم Days :العمر

Date of Birth: ____/____/14____H ____/____/20____ :تاريخ الميلاد

Gender: ☐ Male ☐ Female :الجنس

GENERAL CONSENTS إقرارات عامـــة

I (for Named Patient) signed below, authorize and give consent to my attending physician and/or his/her assistant to provide medical, nursing care and other clinical diagnostic or therapeutic procedures with the exception of surgical and invasive procedures, induction of anesthetics, infusion of blood and blood products and other procedures that require special consent.	أفوض أنا (المريض) الموقع أدناه، وأعطي موافقتي للطبيب المعالج ولمن يختار لمساعدته وذلك لتقديم عناية طبية وتمريضية وأي تشخيصات سريرية أو أية طرق علاجية بإستثناء العمليات الجراحية والإجراءات التداخلية حقن الدم أو مشتقاته أو أي عمل آخر يتطلب موافقة خاصة.
I understand that Dr._____ _____ is attending physician and is the person responsible for the assessment of my medical condition & my care plan & he/she will have the responsibility according to my medical condition, to Discharge or Transfer.	لقد تم إعلامي أن الطبيب المعالج د. _____ _____ هو الشخص المسؤول عن تقييم حالتي الطبية وخطة علاجي وتقع عليه/ عليها مسؤولية أمر خروجي من المستشفى أو تحويلي الى أية جهة عناية صحية أخرى وذلك بناء على ما تستدعيه حالتي الصحية.
I understand that the hospital and its employees will respect my rights and privacy at all times and that the confidentiality of my medical information will be guarded carefully and released only to authorized person.	أفهم وأعي أن المستشفى وموظفيه سوف يحترمون خصوصياتي في كل الأوقات وأن سرية المعلومات الطبية الخاصة بي سوف يحافظ عليها بعناية وسوف تستخدم فقط وحصريا لأجل العلاج وأن تعطى فقط لهولاء الأشخاص الذين يقومون على رعايتي. ولن يتم إعطاء المعلومات لأي شخص أو جهة إلا في حالة موافقتي الشخصية أو موافقة الشخص المصرح كبديل عني.
I shall abide by the hospital rules and regulations.	سوف التزم واطيع كل القوانين والنظم الخاصة بالمستشفى.
I understand that the hospital is not responsible for the loss or damage of my money, valuables and other personal property and that in case of emergency or no alternative situations the items should be handed over to the security for safekeeping.	أفهم إن المستشفى لا تتحمل مسؤولية فقدان النقود، المقتنيات الثمينة أو أية ممتلكات خاصة بي الا في الحالة الطارئة أو في حالة عدم وجود بديل للحفاظ على ممتلكاتي حيث ان هذه الممتلكات يجب أن تعطى لمسؤولي الامن في المستشفى للحفاظ عليها.
If it is found that I am not eligible for free treatment, I am obligated to pay for all services rendered as per my healthcare needs, I agree that the authorities and Kingdom's courts will decide any dispute in connection with such costs.	إذا اتضح إني غير مؤهل للعلاج المجاني فإني أتفهم إني مطالب بدفع كل المصاريف المتعلقة بعلاجي وأوافق أن الجهات المختصة والمحاكم بالمملكة العربية السعودية هي التي تقرر مسؤولية الدفع في حالة وجود خلاف حول المصاريف الواجب دفعها.
In case of emergency, where I am not coherent or conscious and unable to make my healthcare decision, I hereby grant the following person (s) the right to take decision of my medical treatment on my behalf:	إذا كان هناك طارىء أو حالة غيبوبة أو عدم تركيز وكنت غير قادر على إتخاذ قرار بشأن حالتي الصحية فأني أمنح حق إتخاذ القرار بالنيابة عني بشأن حالتي الصحية إلى الاشخاص التالية أسمائهم.
1. Name: _____ Relation to the Patient _____ Date: ____/____/____ Time: _____	الإسم: _____ صلة القرابة: _____ تاريخ: ____/____/____ وقت: _____

Name:_____ الاسم:	MRN: رقم الملف الطبي:
I acknowledge that my signature on this form signifies that I am in agreement with all the statements. Signature of Patient:_____ Date: ____/____/____ Time: _____	أقر أن توقيعي على هذه الأستمارة يعني إنني موافق على كل بنودها وإنني قرأتها بالكامل قبيل توقيعي هذا. توقيع المريض: _____ تاريخ: ____/____/____ وقت: _____
Substitute Decision Maker	**من ينوب عن المريض (أو صانع القرار البديل)**
In case of emergency and the patient is unable to make decision and not granted any person to sign on his behalf. Substitute Decision Maker Name_____ Relation to the Patient _____ Signature: _____ Date: ____/____/____ Time: _____ Reason for Patient not signing to Consent: _____	في الحالة الطارئة وحين يكون المريض غير قادر على إتخاذ القرار ولم يمنح أحد حق التوقيع بالنيابة عنه. إسم من ينوب عن المريض:_____ صلة القرابة:_____ التوقيع: _____ تاريخ: ____/____/____ وقت: _____ سبب عدم توقيع المريض: _____
<u>In case of emergency and no Substitute Decision Maker</u> and patient not granted any person to sign on his behalf We certify that, we have examined the patient and it is our professional opinion that this patient lacks decision capacity to take health care decision and any delay providing medical treatment will endanger his life or lead to serious body harm. **1. Physician Name & ID No.:** _____ Position: _____ Signature: _____ Date: ____/____/____ Time: _____ **2. Physician Name & ID No.:** _____ Position: _____ Signature: _____ Date: ____/____/____ Time: _____	<u>في الحالة الطارئة وغياب من ينوب عن المريض</u>. وكون المريض لم يمنح أحد حق التوقيع بالنيابة عنه. نحن نأكد ونوثق أنه عند فحص المريض وحسب رأينا المهني أن هذا المريض غير قادر على إتخاذ القرار بشأن حالته الصحية وأن أي تأخير في تقديم العناية الطبية اللازمة سوف يعرض حياته للخطر أو قد يؤدي الى عواقب وخيمة إسم الطبيب والرقم الوظيفي: _____ وظيفته: _____ التوقيع: _____ تاريخ: ____/____/____ وقت: _____ إسم الطبيب والرقم الوظيفي:_____ وظيفته: _____ التوقيع: _____ تاريخ: ____/____/____ وقت: _____

WITNESS **شاهد**

Name (الإسم)	Signature (التوقيع)	Date & Time (التاريخ والوقت)
1.)		
2.)		
3.)		

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MRN: | | | | | | | | | | رقم الملف الطبي:

Name: _____ الاسم:

Nationality: _____ الجنسية:

Age: _____ ☐ سنة Years ☐ شهر Months ☐ يوم Days العمر:

Date of Birth: ____/____/14____ H ____/____/20____ تاريخ الميلاد:

Gender: ☐ Male ☐ Female الجنس:

SURGICAL AND MEDICAL INTERVENTIONAL PROCEDURE إقرار الجراحة والإجراءات التداخلية

I, the undersigned _____

On my behalf _____

Here by authorize Dr.: _____ and his assistants to perform the following Surgical Operation Interventional Procedure: _____

_____

The physician has fully explained to me my condition, the reasons for the Medical Interventional Procedures/ surgery has also informed me of the expected benefits & complications, possible discomforts & risks that may arises as well as possible alternatives to the proposed treatment.

The procedure has been explained to me as above and I had the chance to have my questions and/or quires answered by my physician.
Main possible complications: _____

_____

Explained to me without any warranty or guarantee from the hospital's side as to the result or cure.

The treating physician or his assistants are entitled to provide additional procedures as reasonable and necessary, including administration of anesthesia and performance of pathology and radiology or excision of tissue / organ the surgeon deems necessary.

I do also authorize the hospital to keep, use or properly dispose any tissue and parts of organs that are excised during this procedure.

Signature of Patient or Guardian _____

Date ___/___/___ Time: _____

I have seen this consent before surgery and explained nature of operation to patient/ guardian.

Name of Doctor: _____

Signature: _____

Date: ____/____/_____ Time: _____

اقرأنا الموقع أدناه _____

بالأصالة عن نفسي أو بالنيابة عن: _____

بالموافقة على أن يقوم الطبيب _____

ومساعديه بإجراء العملية الجراحية /الإجراء التداخلي : _____

_____

قام الطبيب بشرح حالتي المرضية وسبب العملية الجراحية / الإجراء التداخلي والخيارات العلاجية البديلة المقترحة، وكذلك الفوائد العلاجية والمضاعفات والمخاطر المحتملة

وقد تم شرح العملية /الإجراء لي وأعطيت لي الفرصة للأسئلة وتمت الإجابة عليها بوضوح .

شرحت لي المضاعفات الرئيسة لمحتملة: _____

_____

دون تعهد أو ضمان من جهة الطبيب أو المستشفى فيما يتعلق بالنتيجة أو الشفاء .

وللطبيب المعالج أو لمساعديه الحق في اتخاذ مايرونه ضرورياً من الخدمات العلاجية الإضافية كاستخدام التخدير والأشعة والفحص الباثولوجي على سبيل المثال لا الحصر، أو استئصال أي نسيج أو عضو يرى الجراح ضرورة استئصاله أثناء العملية.

كذلك فإنني أفوض المستشفى بالحفظ أو التخلص المناسب من أي عضو أو نسيج تم استئصاله مني.

توقيع المريض أو ولي أمره: _____

التاريخ: ___/___/_____ الوقت: _____

اطلعت على هذا الإقرار قبل إجراء العملية الجراحية /الإجراء الطبي وقمت بشرح ذلك للمريض/ ولي أمره .

اسم الطبيب : _____

التوقيع : ختم:

اسم الشاهد: _____

التوقيع: _____

التاريخ: ___/___/_____ الوقت: _____

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