

OBSTETRIC HAEMORRHAGE: CLINICAL GUIDELINE*

1. AIM/PURPOSE OF THIS GUIDELINE

1.1. This document guides obstetricians, obstetric anaesthetists, midwives, nurses and maternity support workers (MSW) on the recognition and management of Antepartum Haemorrhage, Postpartum Haemorrhage and Massive Obstetric Haemorrhage (MOH), relevant at any time during pregnancy and the postpartum period. MOH management is therefore presented first before consideration of issues relating specifically to bleeding before and after delivery.

Predisposing risk factors for Obstetric haemorrhage (New 2017).

- Multiple pregnancy
- Previous PPH
- Pre Eclampsia
- Fetal macrosomia
- Failure to progress in Second stage
- Prolonged third stage
- Retained placenta
- Placenta accreta
- Episiotomy
- Perineal tear
- General anaesthesia

2. THE GUIDANCE: ANTEPARTUM HAEMORRHAGE

2.1 Introduction

Severe antepartum haemorrhage (APH) occurs in 3-5% of pregnancies. The main differential diagnoses are placenta praevia, placental abruption, bleeding of unknown origin and vasa praevia. Risk factors for APH include increased maternal

age and parity, multiple pregnancy, smoking and cocaine abuse. Risk factors for Placenta Praevia include previous caesarean section (10-15%), TOP & D&C, MROP and myomectomy/TCRE. Risk factors for Placental Abruption include pregnancy Induced Hypertension/PET, FGR, preterm rupture of membranes, fibroids, previous abruption, external trauma, substance abuse, polyhydramnios, low BMI, assisted reproductive techniques and maternal thrombophilias

2.2 Clinical presentation: vaginal bleeding and may also include:

- Abdominal pain
- Uterine tenderness
- Increased uterine tone
- CTG abnormality
- Intra-uterine death
- Disseminated intravascular coagulation
- Maternal collapse

2.3 Complications of APH

- Anaemia
- Infection
- Maternal shock
- Renal tubular necrosis
- Consumptive coagulopathy
- Postpartum haemorrhage
- Complications of blood transfusion
- Fetal hypoxia
- Small for gestational age and fetal growth restriction
- Prematurity
- Fetal death

2.4 Clinical Management

The intensity of resuscitation and monitoring will depend upon severity of bleeding and maternal condition

* V 1.8; 2017.

** Продовжуємо знайомство зацікавлених читачів нашого журналу з міжнародними протоколами лікування (початок див. АГ № 2-17). У сьогоднішньому числі – «Акушерські кровотечі» (Клінічне керівництво, 2017 рік, Корнелльська Королівська лікарня): на початку висвітлюється тема масивних акушерських кровотеч, а потім розглядаються питання кровотеч до й після пологів.



- Contact obstetric middle grade and SHO
- Contact obstetric anaesthetist
- Inform duty obstetric consultant
- Assess for signs of clinical shock
- Assess for risk factors for abruption and placenta praevia
- Review placental site on scan reports and avoid vaginal examination if placenta praevia is suspected (in the presence of pain/contractions a senior obstetrician may need to gently digitally assess cervix for labour or use transvaginal ultrasound if available immediately)
- Site large cannulae (two if large APH or maternal compromise)
- Blood for FBC and Group and save as minimum. Cross match and clotting studies if large APH or maternal compromise
- Assess uterine tone
- Ensure left lateral tilt at all times
- Keep woman warm
- Analgesia as required
- Kleihauer test should be performed in rhesus D-negative women
- For administration of anti-D refer to separate guideline: Anti-D Immunoglobulin (Anti-D) for the prevention of haemolytic disease of the newborn- clinical guideline
- Only when the mother is stable should the viability and condition of the fetus be assessed
- From 28 weeks CTG monitoring should continue until bleeding or significant pain relating to abruption stops. The decision for continuous monitoring at lower gestations should be made by a senior obstetrician
- Consider corticosteroids between 24 and 34+6 weeks' gestation if preterm birth is anticipated but is not required immediately
- Tocolysis should be avoided in a massive APH or there is evidence of fetal compromise
- If the mother remains unstable despite aggressive resuscitation, delivery may be required to stop the bleeding
- In cases of intra-uterine death, vaginal birth is usually appropriate but anticipate PPH. An emergency caesarean section may be necessary for obstetric reasons e.g. transverse lie or if uncorrectable maternal shock
- Remember venous thromboprophylaxis as an inpatient after bleeding has completely settled
- For bleeds unrelated to placenta praevia, a speculum examination must be performed

before discharge (if not performed before in this pregnancy) to exclude a non-uterine genital tract cause for bleeding (e.g. cervical cancer)

2.5 Management specific to Placenta Praevia

- Fetal compromise is rare unless heavy bleeding leads to impaired placental perfusion or unless there is a co-existent abruption. Therefore, conservative management with blood replacement and awaiting cessation of bleeding may be appropriate at preterm gestations
- Diagnosis of praevia and planning the mode of delivery may require trans vaginal ultrasound
- A senior obstetrician should be present at caesarean section
- Assessment for placenta accreta by ultrasound (and possible MRI) is necessary for cases of anterior praevia with previous caesarean section. A plan of care requires a multidisciplinary approach. Refer to the guideline 'MOH-The role of Interventional Radiologist' for further information

2.6 Management specific to Placental Abruption

- Abruption is a clinical diagnosis and neither ultrasound nor kleihauer exclude the diagnosis
- Maternal compromise may be disproportionate to the revealed bleeding so care is needed to avoid inadequate fluid replacement
- Regular clotting studies may be required to exclude or treat disseminated intravascular coagulation
- Assess for pre-eclampsia or fetal growth restriction that may co-exist and further compromise fetal well being

2.7 Management specific to Vasa Praevia

- Commercial tests distinguishing maternal from fetal blood are not validated or locally available and the diagnosis relies on clinical awareness based upon the history and signs of acute fetal compromise disproportionate to the degree of bleeding and maternal condition
- Category 1 caesarean section will usually be required with early cord clamping

2.8 Antenatal Haemorrhage in the community

Arrange for immediate transfer to the obstetric unit; via 999 ambulance request purple transfer (please refer to Maternal transfer Ambulance policy). Commence observations of vital signs and document on MEOWS chart. Position woman in left lateral tilt/manually displace uterus. Paramedic to site cannula on arrival (**New 2017**).

THE GUIDANCE: POSTPARTUM HAEMORRHAGE

2.9 Introduction

Primary Post-Partum Haemorrhage (PPH) is the loss of 500 ml or more from the genital tract within 24 hours of the birth. Any blood loss that causes deterioration in a woman's condition may be considered a PPH. Secondary PPH is defined as abnormal or excessive bleeding from the birth canal between 24 hours and 12 weeks postnatally. PPH can be minor 500-1000 ml or major >1000 ml

2.10 Risk factors

Women with risk factors should be advised to deliver in an obstetric unit where further emergency treatment options are available. If a woman has risk factors for PPH these should be highlighted in her notes and a plan of care discussed with the woman covering the Third Stage of labour. The woman should be advised early IV access in labour, full blood count, group and save and Active Management of the Third Stage.

Antenatal Risk Factors:

- Previous PPH or retained placenta
- Maternal Hb level below 85 g/L at onset of labour
- BMI >35
- Grandmultiparity (P4 or more)
- APH
- Over distension of the uterus (multiple pregnancy, macrosomia, polyhydramnios)
- Existing uterine abnormalities
- Low-lying placenta
- Maternal age 40 years and above
- Pre-existing bleeding disorders
- Hypertension
- Therapeutic anticoagulants

Intrapartum Risk Factors

- Induction
- Augmentation
- Prolonged 1st and 2nd stage and retained placenta

- Precipitate labour
- Pyrexia in labour
- Operative birth or caesarean section

2.11 Management of Postpartum Haemorrhage

The intensity of resuscitation and monitoring will depend upon severity of bleeding and maternal condition.

2.12 Postpartum Haemorrhage in the community

In the Community setting the staff will call Paramedics and arrange Emergency transfer to Acute Unit. Community midwives and subsequently the Paramedics will initiate and undertake the following actions listed up to the point where certain drugs are not carried as stock in the community setting

Identification of the PPH

All blood loss should be estimated in the community setting. Procedures for transferring the women into the obstetric unit should be activated once a 500 ml loss is estimated see appendix (**New 2017**).

The maternal transfer summary should be commenced as soon as possible to the time the midwife identifies the need for transfer (**New 2017**).

2.13 Communication with acute unit (**New 2017**).

The transferring midwife or second health professional must contact the Delivery suite to inform them of the transfer of the woman:

- Royal Cornwall Hospital delivery suite: **01872 252361 / 252365 or 252362**
- North Devon District Hospital delivery suite: **01271 322605**
- North Devon and Exeter Hospital delivery suite: **01392 406650**
- Derriford hospital delivery suite: **01752 763610**

The Situation Background Assessment Recommendations (SBAR) tool should be used to communicate the transfer information to both the ambulance service and the receiving unit.

2.14 Prior to transfer the midwife must (**New 2017**).

- Ensure woman and baby labelled with a hand written wristband which are replaced with printed wristbands as per RCHT positive patient identification procedure, on admission to the unit.



- Refer to Maternal transfer by Ambulance Policy

In the Hospital Setting staff will call for help: coordinator, scribe, runners, obstetric middle grade, SHO and anaesthetist.

- Lie the woman flat
- Administer facial oxygen with non rebreathe mask and monitor oxygen saturation levels
- Continually assess Airway, Breathing, Circulation
- Massage the uterus and commence bimanual compression. This is tiring-change clinician regularly to maintain effectiveness
- Assess cause of blood loss remembering the four T's:
 - **T**one-palpate uterus and use uterotonics
 - **T**issue-examine placenta and membranes and consider theatre for examination under anaesthetic (EUA). Remember that clot alone in the cavity may impair contractility
 - **T**rauma-systematically examine the lower genital tract and repair a tear. EUA may be required to identify and access a cervical or forniceal tear
 - **T**hrombin-assess for bruising, puncture site ooze and evaluate repeated blood results
 - Consider rare causes such as uterine rupture or inversion, broad ligament haematoma and extra genital bleeding (e.g. splenic, liver capsule or adrenal)
 - Secondary PPH is usually due to retained products and/or infection
- Empty the bladder inserting a size 12ch Foleys Indwelling Catheter
- IV access with one (consider two) wide bore cannulae
- Take blood for FBC and Group and save as minimum. Cross match and clotting studies if large PPH or maternal compromise
- Intravenous fluids Hartmanns 1000 ml stat
- Screen for and treat potential infection. Remember Sepsis 6
- Administer Uterotonic Drugs:
 - repeat bolus oxytocic: Ergometrine 500 mcgs (IM or IV with caution) or Syntometrine 1 ampule IM or Syntocinon 5 units IM (if hypertensive)

- Syntocinon 40 iu in N/Saline 0.9% 500 ml @125 ml/hr IV
- Misoprostol 800-1000 mcg PR
- Carboprost 250 mcg IM at 15 minute intervals up to a maximum of 8 doses (caution asthma)
- Tranexamic acid 1g IV (not a uterotonic)
- Early decision for EUA if bleeding on going and inform consultant obstetrician. See MOH section for surgical options
- Remember venous thromboprophylaxis as an inpatient after bleedinghas completely settled

Documentation

- Commence full MEOWS assessment including fluid balance, initially at 5 minute intervals then as per MEOWS score.
- Complete documentation, PPH proforma and arrange debrief for woman, her family and staff involved
- Datix to Risk Management

THE GUIDANCE: MASSIVE OBSTETRIC HAEMORRHAGE

2.15 Definitions:

Massive Obstetric Haemorrhage is defined as blood loss >2000 ml or rate of blood loss of 150 ml/min, or 50% blood volume loss within 3hrs. It may result in a decrease in haemoglobin (Hb) >40 g/l, or an acute transfusion requirement of >4 units. An MOH that triggers the 'Massive Obstetric Haemorrhage' protocol is defined as blood loss that is 'uncontrolled' and 'on-going' with a rate of blood loss of 150 mls or more per minute or >2 L.

2.16 Trigger Phrase:

The anaesthetist/obstetrician leading on the management of the massive obstetric haemorrhage must communicate to all members of the clinical team involved in the care of the women that the situation has now become a '**Massive Obstetric Haemorrhage**' (MOH). The time that the MOH was declared must be noted and documented on the proforma (Appendix 1). Any subsequent communication between the clinical team and other clinical areas e.g. portering personnel and laboratory personnel, must include the trigger phrase of '**Massive Obstetric Haemorrhage**'

2.17 Communication and Resuscitation must be simultaneous (New 2017).

CALL FOR HELP — Summon Help — via emergency Buzzer

2.18 Communication pathway:

- Call the senior midwife, resident anaesthetist, Obstetric Registrar and SHO
- Involve senior medical staff early (Senior Anaesthetists and consultant Obstetrician)
- Midwifery coordinator to nominate one person to communicate with lab staff and support services
- Nominated person to call the neonatologist if the baby is alive and undelivered
- Nominated person to call the blood bank (ext. 2500) and alert lab staff that there is a **Massive Obstetric Haemorrhage**
- Allocate a MSW or porter to be on standby for urgent blood samples/collection of blood
- Consider informing Intervention Radiology team (see separate guideline). This should be done at Consultant level

2.19 Resuscitation

- Full A to E assessment and management of Airway, Breathing, Circulation, Drugs/Disability, Exposure and Emergency Surgery
- Oxygen 100% high flow, via reservoir mask
- Full left lateral tilt for APH — Head down, legs up
- Consider warming blanket
- Site two large bore IV cannulae (at least 16 g). Take blood at the same time for urgent cross match (type specific), full blood count (FBC) and coagulation screen.
- Commence a Modified Obstetric Early Warning System (MOEWS) chart including fluid balance monitoring. If the woman is already in theatre the monitoring will be done by the anaesthetist using the appropriate anaesthetic chart and the MOEWS chart will be started when the woman is in recovery

2.20 Fluid balance

- Warm all resuscitation fluids and aim to correct hypovolaemia initially with crystalloids
- Consider permissive hypotension — systolic BP < 85 mm Hg

- If a blood transfusion is required urgently and a delay anticipated in receiving group specific blood, consider the use of O Rhesus negative blood in Maternity blood fridge.
- Dextrans are hazardous and should not be used in obstetric practice
- Restore normovolaemia, monitor Hb and haematocrit, use nearside patient testing (HaemaCue)
- If the MOH trigger is called, request '**Obstetric Haemostatic Pack**' from lab (ext. 2500). Pack 1 contains 4 units of type specific blood. Pack 2 will automatically follow pack 1 unless blood bank is asked to stand down. Pack 2 will contain FFP and platelets (which should be given on arrival) and a further 4 units of cross matched blood. Pack 3 contains FFP, 4 X red cells, platelets and Cryoprecipitate
- Use FBC, coagulation studies, fibrinogen levels and haematology advice to guide the use of further blood products: FFP (for clotting factors), cryoprecipitate (for fibrinogen), platelets (to maintain $>50 \times 10^9/l$).
- Re-infusion of blood from the cell saver can be given through a normal blood giving set. Even though a Leucodepletion filter is recommended, it may not be appropriate for acute resuscitation as this will slow the reinfusion (see Obstetric Cell Salvage guideline). Cell Saver blood must be prescribed

2.21 Monitoring

- Monitor heart rate, blood pressure, respiratory rate, oxygen saturation and temperature at 15 minute intervals
- Record MEOWS score
- Catheterise and record urine output hourly
- Blood gases and lactate as advised by anaesthetist
- Consider invasive monitoring to guide on going therapy (A-line, CVP line)
- CTG +/- ultrasound if antenatal
- Uterine height/tone/contractility and vaginal blood loss

2.22 Clinical Management

- If antenatal: consider expediting delivery
- If postnatal: rub up contraction and commence bimanual compression. This is tiring-change clinician regularly to maintain effectiveness



- Transfer to theatre early for further resuscitation and possible surgery
- Request ODP to set up cell saver
- Start **medical management** (for postpartum cases):
 - Oxytocin 40 iu in 500 mls Normal Saline given at 125 mls/per hour for 4 hrs (10iu per hour)
 - Ergometrine 500 mcg IM or IV (NOT if raised BP)
 - Carboprost 250 mcg given deep IM every 15 minutes up to 8 doses (NOT if asthmatic)
 - Misoprostol 800 mcg PR
 - Tranexamic acid 1g IV
- **Surgical manoeuvres:**
 - Bakri balloon
 - Vaginal pack
 - B Lynch suture
 - Ligation of uterine and then internal iliac arteries (but not if considering Intervention Radiology)
 - Consider role of interventional radiology
- Hysterectomy (involve second consultant in decision if time allows and additional skills required). Don't delay decision
- **Post operative care:**
 - Multidisciplinary decision to determine requirements for ICU/HDU care
 - Inform blood bank of resolution of MOH
 - Consider prophylactic antibiotics
 - Blood transfusion to be avoided after acute management unless very symptomatic
 - Consider intravenous iron
 - Venous thromboprophylaxis should be commenced after haemostasis secured due to prothrombotic state developing after major haemorrhage
 - Debrief the woman and her partner
- **Documentation:**
 - Complete MOH proforma
 - Datix to Risk Management

3. MONITORING COMPLIANCE AND EFFECTIVENESS

Element to be monitored	Application of this guideline in Antepartum, Postpartum and Massive Obstetric Haemorrhage
Lead	Maternity Risk Management Team
Tool	Are appropriate interventions undertaken and in accordance with the guideline
Frequency	Individual cases identified via Risk Management and Maternity Forum
Reporting arrangements	A formal report of the results will be received at the Maternity Forum / Clinical Audit Forum.
Acting on recommendations and Lead(s)	Any deficiencies identified will be discussed at the Maternity Risk Management Forum / Clinical Audit Forum and an action plan developed Action leads will be identified and a time frame for the action to be completed The action plan will be monitored by the Maternity Risk Management Forum / Clinical Audit Forum
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within a time frame agreed on the action plan A lead member of the forum will be identified to take each change forward where appropriate The results of the audits will be distributed to all staff through the Risk Management or Practice Development Newsletter and Maternity Forum.

4. EQUALITY AND DIVERSITY

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

APPENDIX 1. GOVERNANCE INFORMATION

Document Title	OBSTETRIC HAEMORRHAGE CLINICAL GUIDELINE			
Date Issued/Approved:	5 th September 2017			
Date Valid From:	5 th September 2017			
Date Valid To:	5 th September 2020			
Directorate / Department responsible (author/owner):	Mr Rob Holmes and Karen Watkins, Obstetric Consultants			
Contact details:	01872 252730			
Brief summary of contents	This guidance is for obstetricians, obstetric anaesthetists, midwives, nurses and maternity support workers and gives guidance on the management of Obstetric Haemorrhage.			
Suggested Keywords:	Massive Obstetric Haemorrhage, post-partum haemorrhage, PPH, ante partum haemorrhage, APH, praevia, abruption, vasa praevia, accrete, maternal collapse, bleeding, MOH, FFP, Bakri, embolization, cell salvage, oxytocin, platelets, Ergometrine, Misoprostol, Carboprost, interventional radiologist, B Lynch			
Target Audience	RCHT	PCH	CFT	KCCG
	✓			
Executive Director responsible for Policy:	Medical Director			
Date revised:	5 th September 2017			
This document replaces (exact title of previous version):	Obstetric Haemorrhage Clinical Guideline			
Approval route (names of committees)/ consultation:	Maternity Guidelines Group Obs and Gynae Directorate Meeting Divisional Board			
Divisional Manager confirming approval processes	Head of Midwifery			
Name and Post Title of additional signatories	Not required			
Signature of Executive Director giving approval	{Original Copy Signed}			
Publication Location (refer to Policy on Policies — Approvals and Ratification):	Internet & Intranet	ü	Intranet Only	
Document Library Folder/Sub Folder	Clinical / Midwifery and Obstetrics			
Links to key external standards	CNST 3.7			
Related Documents:	<ul style="list-style-type: none"> • RCOG: Antepartum Haemorrhage (Green-top Guideline No. 63, 2011) • ROCCG: Placenta Praevia, Placenta Praevia Accreta and Vasa Praevia: Diagnosis and Management (Green-top Guideline No. 27, 2011) • BJA-CEACCP: Massive haemorrhage in pregnancy volume 5 number 6 (2005) • The Scottish obstetric guidelines and audit project; The Management of PPH (Updated March 2002) • Frca.co.uk (Emergency treatment of obstetric haemorrhage) Blood transfusion and the anaesthetist: management of massive haemorrhage. AAGBI (Oct 2010) 			
Training Need Identified?	Included in annual obstetric emergencies day			

Version Control Table

Date	Version	Summary of Changes	Changes Made by (Name and Job Title)
April 2008	V1.0	Initial Issue	Dr Catherine Ralph Consultant Obstetric Anaesthetist
January 2011	V1.1	Inclusion of massive obstetric haemorrhage trigger phrase	Dr Catherine Ralph Consultant Obstetric Anaesthetist
April 2012	V1.2	Compliance monitoring tool added	Dr Catherine Ralph Consultant Obstetric Anaesthetist
September 2012	V1.3	Changes to compliance monitoring only	Jan Clarkson Maternity Risk Manager
June 2013	V1.4	If a blood transfusion is required and a delay is anticipated in receiving group specific blood, use 0 Rhesus negative blood	Jan Clarkson Maternity Risk Manager
October 2013	V1.5	Added: If bleeding continues: (Request Obstetric Haemostatic Pack from lab) pack 1 contains 6 units of cross matched blood, pack 2 will automatically follow pack 1 unless blood bank is asked to stand down, and that will contain FFP and platelets (which should be given on arrival) and a further 6 units of cross matched blood Alteration: Fresh Frozen Plasma (FFP) is only produced upon request or routinely with second pack. Changed blood g/dl to g/l	Jan Clarkson Maternity Risk Manager
6 th March 2014	V1.6	Added drug doses of uterotonics: <ul style="list-style-type: none"> • Oxytocin 40iu in 500 mls Normal Saline given at 125 mls/per hour for 4 hrs (10iu per hour). • Ergometrine 500 mcg, given IM or IV (NOT if raised BP). • Carboprost 250 mcg given deep IM every 15 minutes up to 8 doses (NOT if asthmatic). • Misoprostol 800 mcg PR or PV, (avoid PV if using cell salvage). Changed: 4 g/dl to 40 g/l in line with current Hb levels	Dr Catherine Ralph Consultant Anaesthetist
17 th February 2017	V1.7	Flow chart added and minor changes and merging of Major Obstetric Haemorrhage (MoH) Clinical guideline and Post Partum Haemorrhage and addition of Antepartum Haemorrhage section Pack 3 added in line with recommendation from Dr Stephen Bassey	Mr Rob Holmes. Consultant Obstetrician Dr Catherine Ralph, Consultant Anaesthetist Dr Stephen Bassey, Consultant Transfusion Scientist
5 th September 17	V1.8	Risk Factors Communication pathway to alert team Care of APH in the community Care of PPH in the community Communication between community and main unit. Guideline to flow form APH, PPH to MoH Flow charts added as appendices	Trudie Roberts Mater- nity Matron Community and Karen Watkins, Ob- stetric Consultant

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.

This document is only valid on the day of printing

Controlled Document

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APPENDIX 2. INITIAL EQUALITY IMPACT ASSESSMENT FORM

This assessment will need to be completed in stages to allow for adequate consultation with the relevant groups.

<i>Name of the strategy / policy / proposal / service function to be assessed</i>					
Obstetric Haemorrhage Clinical Guideline					
Directorate and service area: Obs & Gynae Directorate			Is this a new or existing Policy? Existing		
Name of individual completing assessment: Rob Holmes			Telephone: 01872-250000		
1. <i>Policy Aim*</i> <i>Who is the strategy / policy / proposal / service function aimed at?</i>	To give guidance to obstetricians, obstetric anaesthetists, midwives, nurses and maternity support workers on the management of Antepartum Haemorrhage, Postpartum Haemorrhage and Major Obstetric Haemorrhage.				
2. <i>Policy Objectives*</i>	To ensure timely recognition and management of Antepartum Haemorrhage, Postpartum Haemorrhage and Major Obstetric Haemorrhage.				
3. <i>Policy — intended Outcomes*</i>	Safe outcome for pregnant or newly delivered women.				
4. <i>*How will you measure the outcome?</i>	Compliance Monitoring Tool				
5. <i>Who is intended to benefit from the policy?</i>	Pregnant and newly delivered women.				
6. a) Who did you consult with b) Please identify the groups who have been consulted about this procedure.	Workforce	Patients	Local groups	External organisations	Other
	x				
	Please record specific names of groups Clinical Guidelines Group Obstetric and Gynecology Directorate				
What was the outcome of the consultation?	Guideline approved				

7. The Impact

Please complete the following table. **If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.**

Are there concerns that the policy **could** have differential impact on:

Equality Strands:	Yes	No	Unsure	Rationale for Assessment / Existing Evidence
Age		X		All Pregnant Women
Sex (male, female, trans-gender / gender reassignment)		X		All Pregnant Women
Race / Ethnic communities/ groups		X		All Pregnant Women
Disability — Learning disability, physical impairment, sensory impairment, mental health conditions and some long term health conditions		X		All Pregnant Women



Religion / other beliefs		X		All Pregnant Women. There is a separate guideline for Women Declining Blood Products
Marriage and Civil partnership		X		All Pregnant Women
Pregnancy and maternity		X		All Pregnant Women
Sexual Orientation, Bisexual, Gay, heterosexual, Lesbian		X		All Pregnant Women
<p>You will need to continue to a full Equality Impact Assessment if the following have been highlighted:</p> <ul style="list-style-type: none"> • You have ticked «Yes» in any column above and • No consultation or evidence of there being consultation — this <u>excludes</u> any <i>policies</i> which have been identified as not requiring consultation. or • Major this relates to service redesign or development 				
8. Please indicate if a full equality analysis is recommended.		Yes		No X
9. If you are not recommending a Full Impact assessment please explain why.				
N/A				
Signature of policy developer / lead manager / director Mr Rob Holmes			Date of completion and submission 5 th September 2017	
Names and signatures of members carrying out the Screening Assessment		1. Rob Holmes 2. Human Rights, Equality & Inclusion Lead		

Keep one copy and send a copy to the Human Rights, Equality and Inclusion Lead
c/o Royal Cornwall Hospitals NHS Trust, Human Resources Department, Knowledge Spa,
Truro, Cornwall, TR1 3HD

This EIA will not be uploaded to the Trust website without the signature of the Human Rights, Equality & Inclusion Lead.

A summary of the results will be published on the Trust's web site.

Signed Sarah-Jane Pedler

Date 5th September 2017

APPENDIX 3.

Royal Cornwall Hospital NHS Trust Directorate of Obstetrics & Gynaecology

Obstetric Haemorrhage Summary Proforma

Date and time of Haemorrhage		
Location of delivery		RCHT / Penrice / Helston / Home/ St Mary's
Mode of delivery		NVD / Kiwi Ventouse / Forceps / LSCS / Vaginal Breech
Date and Time of delivery		
Total blood loss		
Time transfer to RCHT (if community site)		
Primary source of bleeding		Uterine atony / retained placenta / genital tract trauma / Other (please state
Secondary source of bleeding		Uterine atony / retained placenta / genital tract trauma / Other (please state
Communication	Name	Time called /Time arrived
Delivery suite coordinator:		/
Obstetric Registrar:		/
Obstetric SHO:		/
Resident Anaesthetist:		/
Consultant Obstetrician:		/
Senior Anaesthetist:		/
ODP:		/
Blood bank informed:		/
MSW/Porter on standby for urgent samples/blood collection:		/
'Massive Obstetric Haemorrhage'	Yes/NA	Time:
Trigger phrase.		
Obstetric haemostatic pack Requested by	Yes/NA	Time
Interventional radiologist:	Yes/NA	Time
Other personnel involved:		
		Time commenced
Facial oxygen		
MEOWS chart/observations		
Intravenous access — 2 large bore cannulae		
FBC, clotting, G&S or cross match & sent		
Fundal massage		
Urethral catheter		
Drugs		
Bimanual compression		
In to theatre (management to continue on green op sheet)		

Use MEOWS chart for observations and, fluid input and output Summary of fluid replacement

Product	Total Volume Given
Normal Saline	
Hartmann's	
Gelofusine	
Blood — cross-matched	
Blood — O Rh — ve	
Other i.e. Fresh Frozen Plasma(FFP) /Cryo/ Platelets	

Summary Uterotonics used

Product	Dose and Route of administration	Number of times given
Syntrometrine		
Syntocinon/Ergometrine bolus		
Syntocinon infusion		
Haemabate		
Misoprostol		

Serial Haemoglobin (Hb) & Clotting Results

Date / Time						
Signature						
Hb						
WBC						
Platelets						
Hct						
INR						
APPT						
Fibrinogen						

Name _____

Signature _____ Date _____

**APPENDIX 4.
SWASFT AMBULANCE TRANSFER: MATERNAL and NEONATAL**

The ambulance service provides a **purple** (category 1) emergency response that **will not** be diverted to other incidents for patients who are in cardiac arrest or an immediately life threatening situation. Examples of situations requiring a **purple** response are:

- Active seizure/eclamptic fit
- PPH — significant uncontrolled bleeding with maternal compromise
- Delayed first and second stage labour with confirmed fetal compromise
- APH — significant blood loss/signs of abruption with confirmed maternal compromise

- Fetal bradycardia and birth not imminent
- Thick meconium with confirmed fetal compromise
- Cord prolapse
- Shoulder dystocia in which the baby has been unable to be delivered
- Neonatal resuscitation

In exceptional circumstances a woman may not meet the definition for a **purple** response but you may feel that a **purple** response is required e.g. PPH where immediate transfer from a birth centre/home is required. In these circumstances please apply the following procedure:

- Dial 999

- When asked what is wrong with the patient state that they are in peri-arrest; this will initially trigger a **red** response
- When triage commences, advise the call taker that you require a **purple** response and you wish to speak **immediately** to a clinical supervisor
- Once transferred to the Clinical Supervisor explain the situation. Where it is agreed to be appropriate, the Clinical Supervisor will over-ride the system and confirm a response

The call sequence above is **only** to be used for those patients deemed to be suffering an immediate threat to life.

For all other emergencies, a **red** (category 2) level 'lights and sirens' response will still be provided but may be diverted to more serious **purple** calls. **Red** calls **will not** be diverted to lower level categories. Examples of situations given by SWAST requiring a **red** response are:

- PPH — minimal bleeding and no patient compromise
- Thin meconium — no suspected fetal compromise
- Delayed first and second stage labour with suspected fetal compromise
- Uncomplicated fetal tachycardia
- APH — small amount of blood loss but no maternal compromise

- Retained placenta

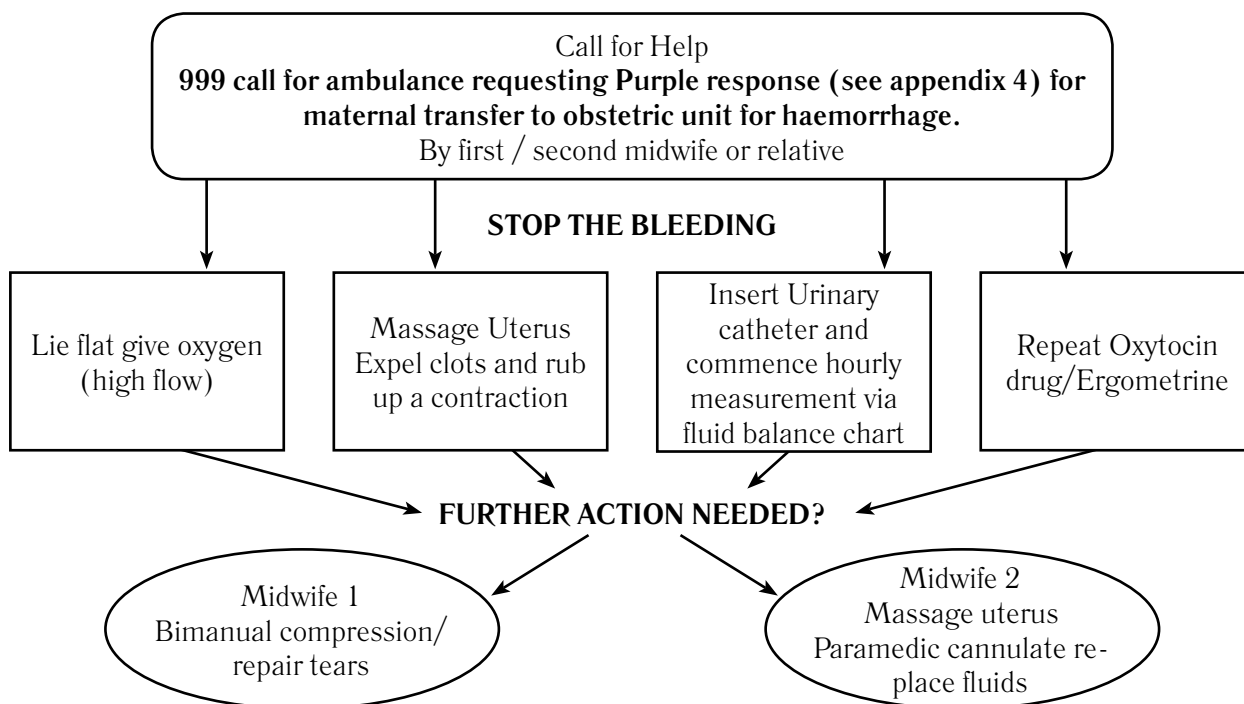
You can also request an urgent ambulance response within 1, 2 or 4 hours for incidents not deemed **purple** or **red**.

The following examples provided by RCHT may be considered as urgent but not **purple** or **red**:

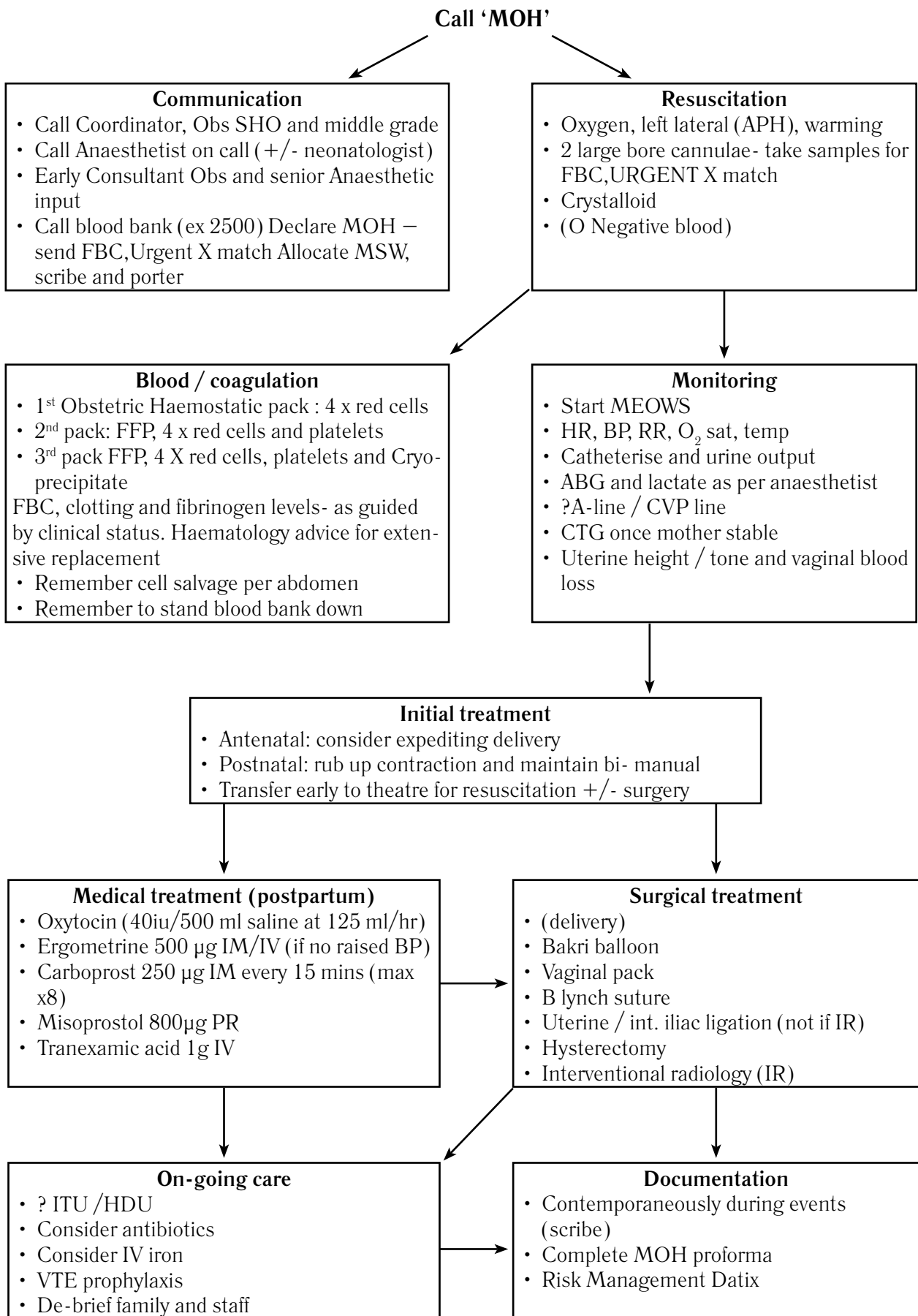
- Delay in progress of labour
- Maternal observations deviating from normal but woman asymptomatic and MEOWs score is 4 or less
- Meconium Liquor and birth not imminent
- Request for further analgesia
- Perineal repair requiring obstetric intervention where bleeding is no concern
- Small APH with no maternal compromise
- Retained placenta without significant blood loss
- Baby born in the community who did not meet the criteria for community birth*
- Baby born with minor abnormality not causing compromise but requiring paediatric assessment*
- Baby born IUGR requiring paediatric assessment*

* *These babies can be managed appropriately in the community while you await the ambulance, making sure the baby is kept warm, infant feeding has commenced and the parents are advised appropriately.*

APPENDIX 5. COMMUNITY MIDWIFE IMMEDIATE ACTION



APPENDIX 6. MASSIVE OBSTETRIC HAEMORRHAGE (MOH) FLOW CHART



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GO

**Т.Є. Ткачук****Актуальна гінекологія: від лікаря до пацієнта**

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Кайдашев І.П.**Гіперчутливість до лікарських засобів***(російською мовою)*

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