Antepartum Haemorrhage Guideline for management

University Hospitals of Leicester NHS Trust

Trust ref: C39/2011

Contents

INTRODUCTION AND WHO THE GUIDELINE APPLIES TO:

Antepartum haemorrhage (APH) is bleeding from the genital tract during pregnancy. This guideline applies to all women presenting with bleeding after 16 weeks gestation. This is for the use of all staff involved in the management of women with an antepartum haemorrhage, including midwifery, obstetric, anaesthetic, imaging and blood transfusion staff.

WHAT'S NEW:

- Change in language to match RCOG guidance
- Clearer layout including sections for minor, major and severe APH
- Guidance about admission and discharge
- Clarification on steroid administration

RELATED DOCUMENTS:

Preterm Labour Guidance in the Absence of PPROM UHL Obstetric Guideline

Enhanced Maternity Care UHL Obstetric Guideline

Declining Blood and Blood Products UHL Obstetric Guideline

Maternity Records Documentation UHL Obstetric Policy

Postpartum Haemorrhage UHL Obstetric Guideline

Patient Health Records - Documenting UHL Policy

Maternal Death UHL Obstetric Guideline

Last Offices Care of the Deceased UHL Policy

Surgical Swabs Instruments Needles and Accountable Items UHL Policy

Resuscitation at Birth UHL Neonatal Guideline

Blood Transfusion UHL Policy

Cardiopulmonary Resuscitation Policy UHL LLR Alliance LPT

Fetal Monitoring in Labour UHL Obstetric Guideline

Anti D Immunoglobulin UHL Obstetric Guideline

Maternity Assessment Unit UHL Obstetric Guideline

GUIDANCE

Antepartum haemorrhage is a common presentation to the maternity unit and varies from minor issue to life threatening emergency for both mother and baby. The actions required from staff will vary depending on severity of the bleeding (remembering that blood loss can be concealed).

INITIAL ASSESSMENT

Assess the severity of bleeding, check maternal observations and auscultate the fetal heart rate.

Consider the cause of the bleeding by asking about abdominal pain and precipitating factors.

Examine the abdomen for uterine tenderness, fetal lie and presentation but defer vaginal examination at this stage.

In the maternity assessment unit, midwives should use the triage guidance to ensure appropriate timely medical assessment.

In cases of major APH, early involvement of the Consultant Obstetrician, Consultant Anaesthetist and haematologist is essential.

Note: Blood loss is usually underestimated, particularly in concealed abruption, and complications can develop rapidly. Weighing pads and sheets can assist in management.

MINOR ANTEPARTUM HAEMORRHAGE

Blood loss <50ml that has settled

Following the initial assessment, a doctor or midwife following appropriate training, competency assessment and when confident to do so, may perform a speculum examination to look for local causes if placenta praevia has been excluded on a previous ultrasound scan and bleeding has settled. Avoid digital VE unless speculum examination reveals an obviously dilated cervix.

A CTG should be performed if the gestation is > 26/40. Prior to this gestation, a sonicaid should be used.

A Kleihauer should be recommended where the woman is Rhesus negative, the blood group is unknown or there is suspicion of concealed abruption (making this clear on the request form). Follow Trust guidance regarding anti-D immunoglobulin: Anti D Immunoglobulin UHL Obstetric Guideline

Continue prophylactic aspirin.

STEROIDS

The vast majority of women presenting with minor APH do not need to be offered antenatal steroids. After 23 weeks, where bleeding is recurrent; there is placenta praevia and / or there is suspicion of threatened preterm labour, a senior obstetrician (ST4 or above) may choose to counsel the woman about steroid administration.

ULTRASOUND

Ultrasound scan is not required routinely unless there are concerns regarding fetal size and wellbeing.

However, where a woman is presenting with recurrent bleeding (three or more episodes), she should be offered an ultrasound for growth assessment (if she has not had one in the last two weeks) and should be moved onto the GROW scanning pathway, if she is not already on it.

ADMISSION AND DISCHARGE

Offer admission if the placenta is low lying, pain present or bleeding ongoing. Where women require admission, a full blood count and group and save should be performed.

Discharge is appropriate for most women once the bleeding has settled. Where there is placenta praevia and recurrent minor (or major) APH, women may be offered long term admission, after a review of risk factors and home circumstances, by a Consultant.

INDUCTION OF LABOUR

Consider next available induction of labour for unexplained bleeding in the absence of low lying placenta if over 37+0 weeks gestation.

Where there has been recurrent APH, consider offering induction of labour at 39-40 weeks or sooner if there is further bleeding after 37 weeks.

MAJOR ANTEPARTUM HAEMORRHAGE

Blood Loss 50 – 1000ml with no signs of clinical shock

This guidance is based on RCOG guidance but the management should be according to the full clinical picture, and not only the estimated blood loss.

Manage as for Massive APH (below) if there are:

- Abnormal maternal observations or haematology,
- Marked abdominal pain or tenderness,
- Fetal heart rate abnormalities.

Women with either significant blood loss (>100ml) or ongoing bleeding should have intravenous access (16g cannula or larger), full blood count, clotting screen (APTT, PT and fibrinogen) and group and save. Cross match blood when there is ongoing bleeding, known red cell antibodies, maternal anaemia or other concerns. Management of major antepartum haemorrhage should usually be on delivery suite rather than in the maternity assessment unit.

Following the initial assessment, a doctor may perform a speculum examination to look for local causes if placenta praevia has been excluded on a previous ultrasound scan and bleeding has settled. Avoid digital VE unless speculum examination reveals an obviously dilated cervix.

A CTG should be performed if the gestation is > 26/40. Prior to this gestation, a sonicaid should be used.

A Kleihauer should be performed where the woman is Rhesus negative, the blood group is unknown or there is suspicion of concealed abruption (making this clear on the request form). Follow Trust guidance regarding anti-D immunoglobulin:

- Anti-D Ig should be given to all non-sensitised RhD-negative women after any presentation with APH, independent of whether routine antenatal prophylactic anti-D has been administered.
- In the non-sensitised RhD-negative woman in the event of recurrent vaginal bleeding after 20+0 weeks of gestation, anti-D Ig should be given at a minimum of 6-weekly intervals.
- In the non-sensitised RhD-negative woman, for all events after 20+0 weeks of gestation, at least 500 iu anti-D Ig should be given followed by a test to identify FMH greater than 4 ml red blood cells; additional anti-D Ig should be given as required.

Ensure woman is nil by mouth until medical review has occurred.

Withhold prophylactic aspirin and low molecular weight heparin (LMWH) until bleeding has settled and medical review has occurred. In the rare event that a woman is fully anticoagulated

due to other medical conditions (such as deep vein thrombosis or mechanical heart valve), seek Consultant advice early.

STEROIDS

Consider offering antenatal steroids between 23 weeks and 34 weeks and 6 days gestation, where bleeding is significant, and / or there is suspicion of threatened preterm labour. Consider steroids between 35 weeks and 38 weeks where caesarean birth is anticipated.

Do not repeat steroid administration.

ULTRASOUND

Ultrasound scan should be offered for growth assessment and placental location (if the woman has not had a scan in the last two weeks). Where bleeding has been significant or recurrent, consider moving the woman to consultant led care pathway and onto the GROW scanning pathway, if she is not already on these.

ADMISSION AND DISCHARGE

Offer admission to all women with major APH. Discharge is appropriate for most women once the bleeding has settled. Where there is placenta praevia and recurrent minor (or major) APH, women may be offered long term admission, after a review of risk factors and home circumstances, by a Consultant.

INDICATIONS FOR BIRTH

A Consultant Obstetrician should be involved in the decision to deliver (or not) where there has been major APH. Timing and mode of delivery will depend on gestation, placental site, maternal and fetal condition as well as the volume of blood loss.

Consider next available induction of labour for unexplained bleeding in the absence of low lying placenta if over 37+0 weeks gestation.

Where there has been recurrent APH, consider offering induction of labour at 39 weeks or sooner if there is further bleeding after 37 weeks.

MASSIVE ANTEPARTUM HAEMORRHAGE

Blood Loss >1000ml and/or signs of clinical shock

Massive antepartum haemorrhage is defined as blood loss over 1000ml or smaller volumes where there is evidence of haemodynamic instability. These cases should be managed on delivery suite.

At presentation, the coordinating midwife, obstetric registrar and anaesthetist should all be asked to attend, using the emergency buzzer / bleep system as required. The Consultant Obstetrician and Consultant Anaesthetist should be informed of all cases of massive antepartum haemorrhage and should usually attend.

IMMEDIATE MANAGEMENT

- IV Access: 2 cannulas, at least one of which should ideally be 16G or greater
- Bloods: FBC, Clotting screen (INR, APTTR, Fibrinogen and TEG), U&Es, LFTs

- Cross match at least 4 units blood. Activate Massive Obstetric Haemorrhage protocol if blood loss >1500ml or earlier if 1000ml and actively ongoing bleeding.
- Request Kleihauer if Rhesus negative or blood group unknown. Administer anti D immunoglobulin (usually 500 International Units) when issued by Blood Bank.
- Maternal pulse and BP every 15 minutes
- Record maternal observations on high dependency chart
- Catheterise and measure hourly urine output.
- Measure blood loss, ideally weigh swabs / sheets / pads.
- CTG if over 26 weeks
- Ultrasound scan to assess fetal viability if unable to auscultate fetal heart rate.

Give antenatal steroids to promote fetal lung maturity if gestation is between 23+0 weeks and 34+6 weeks (or <38 weeks with predicted caesarean delivery) and the woman has not already received a course of steroids.

Start Magnesium Sulphate if delivery is anticipated and gestation is between 24 weeks and 31+6 weeks, using the fetal neuroprotection guideline.

Withhold aspirin and/or low molecular weight heparin (e.g. Enoxaparin) until bleeding stopped and medical review has occurred.

Women should be nil by mouth until the risk of emergency surgery has reduced.

Subsequent management must be discussed with the Consultant on call following assessment of maternal and fetal condition by the obstetric registrar.

If bleeding is severe and continuing, maternal resuscitation should be followed by delivery.

FLUID RESUSCITATION

MATERNAL CONDITION STABLE:

Fluid replacement: 1-1.5 litres Hartmann's solution or synthetic colloid depending on volume of blood loss.

Transfuse as appropriate: only if benefits outweigh risks of blood product administration.

Consider delivery according to fetal gestational age and condition.

UNSTABLE MATERNAL CONDITION

Massive obstetric haemorrhage guideline should be followed (as per the Massive Obstetric Haemorrhage in Postpartum Haemorrhage – Guideline for Management).

Consider delivery if bleeding continues. Ensure maternal resuscitation adequate and coagulation defects corrected. Coagulopathy significantly increases the risks at Caesarean section.

MODE OF DELIVERY

Delivery should be considered depending on gestation and fetal condition and the decision should be made by the most senior Obstetrician available (usually the Consultant).

Vaginal delivery must be discussed with a Consultant Obstetrician and may only be considered when maternal condition is stable, placenta praevia has been excluded and fetal wellbeing is not compromised.

In cases of intrauterine fetal death, vaginal delivery is the management of choice in the absence of maternal collapse. Monitoring for and correction of coagulopathy is vital in these circumstances.

EDUCATION AND TRAINING:

All Obstetricians and Midwives attend Mandatory multidisciplinary training day where specific training regarding haemorrhage is included.

RISK MANAGEMENT:

A clinical incident reporting form must be completed for all obstetric emergencies. Please refer to the Maternity Service Risk Management Strategy for details.

SUPPORTING REFERENCES:

RCOG (2011) Antepartum Haemorrhage, Green top Guideline 63

KEY WORDS

APH, Bleeding, Blood, Massive Haemorrhage, TEG thromboelastography

---

The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.
As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

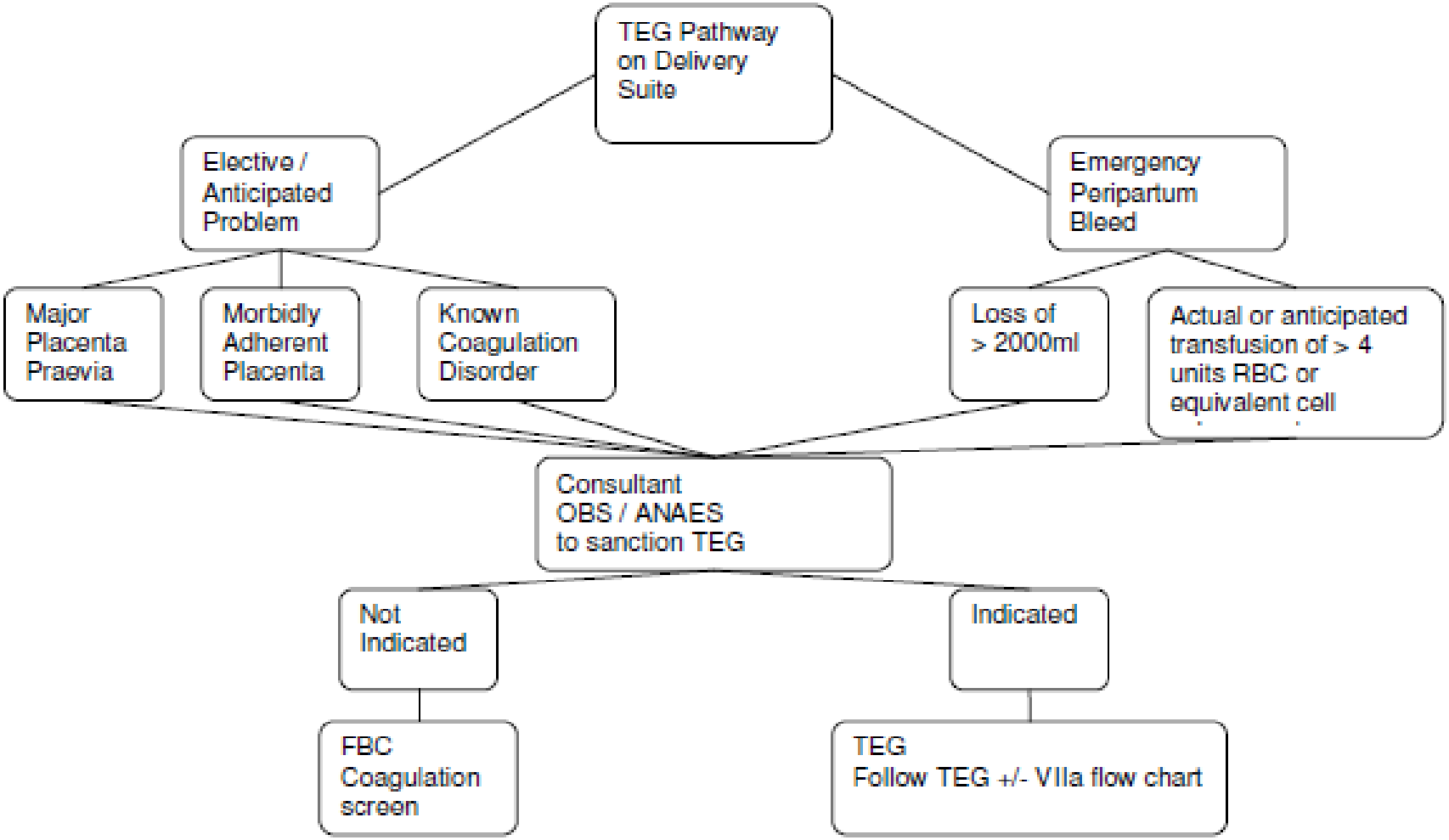
DEVELOPMENT AND APPROVAL RECORD FOR THIS DOCUMENT	
Author / Lead Officer: Original Working Group: Consultant Obstetricians	Executive Lead: Chief Medical Officer
Reviewed by:	N Ling – Consultant Obstetrician A Mathews – Speciality Registrar

Approved by:	Guidelines Group and Maternity Service Governance Group	Date Approved: 18/08/2021

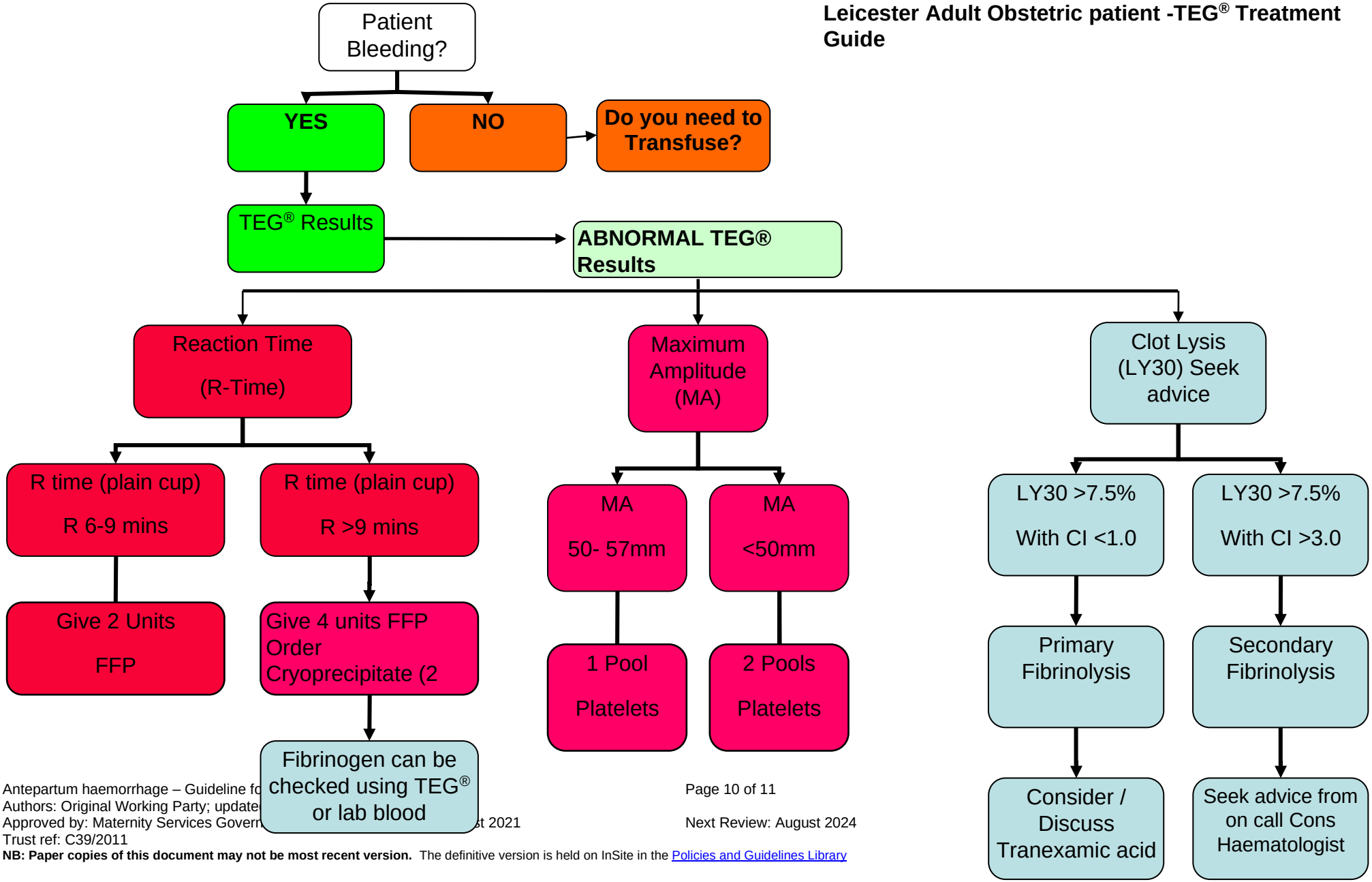
REVIEW RECORD			
Date	Issue Number	Reviewed By	Description Of Changes (If Any)
August 2021	V3	N Ling A Mathews	A couple of phrases made more obvious Steroids for caesarean sections at <39 weeks as per NICE guidance Definitions and names of each volume of haemorrhage changed to fit with RCOG guidance (now minor <50 instead of 100, moderate 50 – 1000 and massive >1000) but management should be based upon clinical picture Updated Trust major haemorrhage protocol live link inserted

DISTRIBUTION RECORD:			
Date	**Name**	**Dept**	**Received**
August 2021	All Midwives and Obstetricians	Maternity	

APPENDIX 1 THROMBOELASTOGRAPHY (TEG) PATHWAY



APPENDIX 2: LEICESTER ADULT OBSTETRIC TEG® TREATMENT GUIDE



MASSIVE HAEMORRHAGE UHL GUIDELINE (LINK)

Please click on the above link for the most up to date UHL Trust massive haemorrhage guideline