Frimley Health
NHS Foundation Trust

Caring for women who refuse blood products in pregnancy and the postnatal period

Key Points

- This maternity guideline seeks to address maternity specific issues and should be read in conjunction the Trust-wide "Blood Transfusion Policy for Adult Patients with related guidelines" and "Guideline for refusal of blood components".
- Care of women who refuse blood products in pregnancy should be multidisciplinary, including input from Obstetricians, Midwives, Haematologists and Anaesthetists.
- All women declining blood products should complete a written Advance Directive.
- A plan for antenatal and intrapartum care, as well as the management of massive haemorrhage should be clearly documented in the maternity notes.
- Haemoglobin levels should be optimised antenatally.
- Any haemorrhage should be managed promptly and proactively with a low threshold for intervention in women declining blood products.
- Properly completed advance directives refusing treatment are legally binding and woman's wishes must be respected; however, she is entitled to change her mind at any time.

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Abbreviations

EPO	Erythropoietin
LMWH	Low molecular weight heparin
PPH	Postpartum haemorrhage
TXA	Tranexamic acid
VTE	Venous thromboembolism

Contents

1. INTRODUCTION

1.1 This maternity guideline seeks to address maternity specific issues and should be read in conjunction the Trust-wide Blood Transfusion Policy for Adults with Related Guidelines https://ourplace.xfph-tr.nhs.uk/media/33870/bsps-blood-transfusion-adult-v30.pdf and the guideline Refusal of Blood Components.

1.2 The majority of women accept blood transfusion if the clinical reasons for its necessity are fully and appropriately explained. However, some women may refuse blood products because of religious beliefs or concerns over safety.

1.3 The main group of women declining blood products are Jehovah's Witnesses, who typically do not accept whole blood or primary blood products, although other products such as Anti-D immunoglobulin can be a matter of personal choice. There are other patients who may refuse blood for different religious or personal beliefs, such as concerns over blood borne infection, or previous blood transfusion reactions. Studies in the US and UK of obstetric outcome in Jehovah's Witness patients have reported a 44 – 65-fold increase in maternal death due to obstetric haemorrhage[1].

1.4 Massive obstetric haemorrhage is often unpredictable and can become life threatening in a short time. In most cases blood transfusion can save the woman's life and very few women refuse blood transfusion in these circumstances. If it is likely that a woman may refuse blood products, the management of massive haemorrhage should be considered in advance.

2. BOOKING

2.1 At booking all women should be asked if they have any objections to blood transfusion and administration of blood products. If a woman is likely to refuse blood transfusion for any reason, this should be documented in the notes and a referral for consultant-led care arranged. Women should receive an initial antenatal clinic appointment between 16 and 24 weeks.

3. ANTENATAL CARE

3.1 The woman should be seen by the Consultant Obstetrician. At the first antenatal clinic appointment, the woman should be seen by an experienced clinician and have the opportunity to discuss her consent for the use of different blood products whilst alone, to ensure that there is no possibility of coercion from others. The clinician should ensure that the woman is aware of the risks of refusing transfusion; particularly the increased maternal mortality rate in women refusing blood products and the increased risk that a hysterectomy may be required to manage bleeding. The clinician should assess the woman's capacity to consent to and refuse treatment.

3.2 **All women declining blood products should complete a written Advance Directive** (See Appendix 1 & 2 of FHFT Guideline for Refusal of Blood Components). Copies of this document should be uploaded on EPIC for staff to refer to as required. A woman should also be encouraged to discuss her advance wishes with her partner/family, and this should be documented. **A plan for antenatal and intrapartum care, as well as the management of massive haemorrhage (including the acceptability of techniques such as intraoperative cell salvage) should be clearly documented in the maternity notes.**

3.3 Women declining blood products should be referred to see a Consultant Haematologist in the Obstetric Haematology Clinic (Dr Philpott and Mr Eniola at Wexham Park Hospital and Dr Rees and Miss Tillett at Frimley Park Hospital) who will discuss in detail which (if any) blood components and/or derivatives may be acceptable, review the Advance Directive document, review the plan for haemorrhage and optimise the antenatal haemoglobin level.

3.4 Patients declining blood products and booked at Wexham Park Hospital should also be referred to the Anaesthetic Antenatal Clinic to make an anaesthetic plan for labour and delivery. This appointment should take place no later than the start of the 3rd trimester or once an obstetric plan for delivery has been agreed. This is not required for patients booked at Frimley Park Hospital.

3.5 The UK Jehovah's Witness Hospital Information Services may be approached by both patients and staff for additional support and information (0208 371 3415) Bloodless Surgery & Medicine by Specialty | JW.ORG Medical Library

4. ANTENATAL OPTIMISATION OF HAEMOGLOBIN LEVELS

4.1 Anaemia is a recognised risk factor for postpartum haemorrhage, so should be proactively avoided in this patient group. In addition to routine booking bloods (FBC and Group and Antibody Screen) further bloods should be sent and reviewed antenatally, including: ferritin, B12 & folate, to be repeated at 28, 36 weeks and if anaemia develops, the result should be managed appropriately.

4.2 Anaemia should be treated promptly, initially with per oral and IV iron as appropriate. Consider use (EPO) for treatment of anaemia prior to delivery, under guidance of Consultant Haematologist. EPO has been used in pregnancy and is not known to be harmful to the fetus; however, there is currently limited evidence for its use in this context. Concomitant iron supplementation should be given to maintain adequate iron stores necessary for the developing erythrocytes. Erythropoietin has a boxed warning stating an increased risk of mortality, myocardial infarction, stroke, & thrombo-embolism. Note the increased risk of VTE in patients receiving EPO – concomitant use of LMWH is strongly recommended.

4.3 The woman should also receive information on dietary iron (available from NHS Blood and Transplant): https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/12315/29352_214mp-iron-in-your-diet_print_blc609-4p-separate-pages.pdf

4.4 It is also important to conserve blood wherever possible antenatally – minimise the volume of blood samples (consider paediatric tubes) and review any medication which could increase bleeding risk, e.g., aspirin or LMWH to ensure that the benefit of giving outweighs the risk.

5. PLACE OF BIRTH

5.1 A woman who refuses blood transfusion in any circumstances should be advised to book for hospital birth, where all facilities and personnel are at hand for the prompt management of major obstetric haemorrhage, including hysterectomy. Birth on Labour Ward is advised, and declining blood transfusion falls outside criteria for the Birth Centre. If the woman makes an informed choice to have a home birth, her midwife must inform their community team leader. She should ensure that the woman and her family are

aware of arrangements to initiate rapid transfer into hospital, should the need arise. All discussions should occur in a non-confrontational manner and clearly documented in the woman's notes.

6. LABOUR

6.1 The consultant obstetrician and the obstetric anaesthetist on Labour Ward should be informed when a woman who refuses blood products is admitted in labour. The potential availability of cell salvage (if acceptable/required) should be explored. It should be explained that cell salvage operation depends upon the presence of trained personnel and may not always be available. Consultants in other specialities need not be alerted unless complications occur.

6.2 Experienced staff should manage the labour routinely. The third stage of labour should be actively managed. If the woman makes an informed choice to have physiological management this must be overseen by a senior midwife. The woman should not be left alone for at least an hour after the birth to enable the early detection of excessive bleeding. Perineal trauma must be repaired at the earliest opportunity to minimise further blood loss.

6.3 If an emergency caesarean section becomes necessary, a consultant obstetrician must be informed and should perform or supervise the surgery if possible.

6.4 For emergency care, if there is any doubt in a clinician's mind concerning the wishes of a patient or what is legally appropriate, the prudent course would be to treat according to the accepted standard of care. Once the patient is stabilised, then there will be additional time to investigate more thoroughly.

7. PPH PREVENTION AT ELECTIVE CAESAREAN SECTION

7.1 If a woman declining blood transfusion delivers by planned Caesarean Section consider giving 1g iv Tranexamic acid (TXA) prior to the procedure (when the anaesthetic is sited) to reduce bleeding risk. There is currently limited evidence for TXA reducing intraoperative blood loss when used as a prophylaxis against PPH following CS [9-11]; however, there is robust evidence for its efficacy in the treatment of PPH.

7.2 Tranexamic acid may reduce the risk for blood loss in caesarean deliveries with a higher benefit observed in high-risk patients, but the lack of high-quality evidence precludes any strong conclusions. **The administration of tranexamic acid before skin incision, but not after cord clamping, was associated with a large benefit.**

7.3 TXA crosses the placenta but there are no known fetal harms and it is already used antenatally in the context of several haematological conditions. There is no evidence that TXA use alone increases the risk of postpartum VTE and women should have their VTE risk score calculated and LMWH prescribed as indicated.

8. IDENTIFICATION OF RISK FACTORS FOR POSTPARTUM HAEMORRHAGE

If the woman has any of the risk factors below, then an intravenous infusion of oxytocin is advised following delivery:

- Maternal obesity (BMI > 30 at booking)
- Increased maternal age > 40 years
- Four or more children
- Multiple pregnancy
- Polyhydramnios
- Placenta praevia/abnormally invasive placenta
- Uterine fibroids
- Coagulation disorders, e.g., Von Willebrands disease
- Previous history of bleeding, antepartum or postpartum
- Prolonged labour (especially when augmented with oxytocin)

9. POSTNATAL CARE

9.1 The great majority of pregnancies will end without serious haemorrhage. When the mother is discharged from hospital, she should be advised to report promptly if she has any concerns about bleeding during the puerperium.

9.2 Venous thromboembolism (VTE) prophylaxis is used in most patients; refusal of blood transfusion is not a reason to avoid VTE prophylaxis. Conversely, anticoagulation or antiplatelet therapy that is inappropriate or no longer needed should be discontinued.

10. MANAGEMENT OF HAEMORRHAGE

10.1 If bleeding occurs at any time during pregnancy, labour or the puerperium the obstetric and anaesthetic registrars and consultants should be informed and standard management should be commenced promptly. The threshold for intervention in women declining blood products should be lower than in other patients.

10.2 The principle of management of haemorrhage in these cases is to avoid delay. Rapid decision-making may be necessary, particularly with regard to surgical intervention. Alongside standard fluids, uterotonics and tranexamic acid consider use of intrauterine compression balloons or compression sutures, such as B-Lynch. The consultant haematologist should also be notified, even though the options for treatment may be severely limited.

10.3 Considerations to control bleeding during delivery

surgical measures:
- considering early transfer and delivery in theatre for adequate space, staff, light, availability of equipment
- use of cell salvage if accepted by patient and available
- haemostatic surgical devices, fibrin glue, tissue adhesives, uterine compression balloon or compression sutures such as B-Lynch, vaginal pack

- anaesthetic measures such as controlled hypotension; elevating the surgical field above the rest of the body, fluids and vasopressors, TXA, minimising amount of blood withdrawal eg using paediatric bottles or hemocue

- Emergency reversal of anticoagulation (if present): Heparins have a relatively short half-life. Discuss with anaesthetist for reversal. Protamine sulfate can be used for reversal.
There is no direct reversal agent for antiplatelet medications. Some small studies have shown that there might be some clinical improvement of platelet function with the use of an antifibrinolytic medication such as tranexamic acid

- Routine use of TXA has the potential to decrease the need for transfusion, transfusion-related complications and costs.

10.4 Refer to the FHFT Postpartum haemorrhage guideline for further detail.

10.5 Hysterectomy is normally the last resort in the treatment of major obstetric haemorrhage, but in women refusing blood products delay in performing hysterectomy may increase the risk of death. Subtotal hysterectomy can be just as effective as total hysterectomy, as well as being quicker and safer. In some cases, there may be a place for internal iliac artery ligation. The timing of hysterectomy is a decision for the consultant attending.

10.6 Following haemorrhage monitor carefully for further blood loss. Try to minimise the volume of blood samples taken. Further management should be planned by the obstetric, haematology and anaesthetic teams, and may include transfer to the ITU, recombinant erythropoietin (EPO), parenteral iron therapy and ensuring adequate protein for haemoglobin synthesis.

11. CAPACITY TO REFUSE TREATMENT AND LEGAL CONCERNS IN THE CASE OF HAEMORRHAGE

11.1 The woman should be kept fully informed her ongoing condition and treatment. It is important that staff maintain her trust and communicate in a professional manner. If standard treatment is not controlling the bleeding, the woman should be advised that blood transfusion is strongly recommended to save her life. Any patient is entitled to change her mind about a previously agreed treatment plan.

11.2 The treating doctor must be satisfied that the woman is not subject to pressure from others. The doctor should request any accompanying persons to leave the room so that they (with a midwife or other colleague as a witness) can confirm that the woman is making her decision freely and without coercion.

11.3 If the woman maintains her refusal to accept blood or blood products, her wishes should be respected. The legal position is that any adult (18 years old or over) who has the necessary mental capacity to do so is entitled to refuse treatment, even if it is likely that refusal will result in their death. Properly completed advance directives are legally binding, and to administer treatment in these circumstances would constitute battery. Advance directives cannot be revoked by a patient's relatives, staff members or the court, even when life is in danger.

12. MATERNAL DEATH

If the woman dies, her relatives require the full support available to bereaved families. Please see the FHFT Guideline on Maternal Death for further guidance. It is very distressing for staff to have to watch a woman bleed to death whilst refusing effective

treatment and support should be promptly available for staff in these circumstances. Sources of support for bereaved families and staff (local and national) are detailed in the FHFT Maternal Death guideline.

AUDITABLE STANDARD

An individual management plan is documented for all women who decline blood transfusion

MONITORING

This guideline will be subject to continuous audit on a case by case basis within the audit of PPH and the findings presented quarterly to labour ward forum. The maternity risk coordinator is responsible for coordinating the audit. Action plans will be monitored at labour ward forum. PPH >2500ml is monitored monthly on the maternity dashboard.

COMMUNICATION

If there are communication issues (e.g., women with limited understanding of English, learning difficulties, or vision or hearing difficulties) staff will take appropriate measures to ensure the woman (and her partner, if appropriate) understand the actions suggested in this policy and rationale behind them.

REFERENCES

1. Currie, J. et al. “Management of women who decline blood and blood products in pregnancy”, *The Obstetrician and Gynaecologist* (2010) 12:13-20

2. Royal College of Obstetricians and Gynaecologists “Blood Transfusion in Obstetrics” Green-top Guideline No. 47 (2015)

3. Royal College of Obstetricians and Gynaecologists “Prevention and Management of Post-Partum Haemorrhage” Green-top Guideline No. 52 (2016)

4. Royal College of Surgeons of England “Caring for patients who refuse blood” (2016)

5. Blood Transfusion Policy for Adults with Related Guidelines FHFT Trust Policy

6. Postpartum Haemorrhage FHFT Trust Guideline

7. Maternal Death FHFT Trust Guideline

8. Anaemia in Pregnancy FHFT Trust Guideline

9. Simonazzi G. et al. “Tranexamic acid for preventing postpartum blood loss after caesarean delivery: a systematic review and meta-analysis of randomized controlled trials” *Acta Obstetricia et Gynecologica Scandinavica* (2016) 95: 28–37.

10. Sentilhes, L. et al. “Tranexamic acid for the prevention and treatment of postpartum haemorrhage” *British Journal of Anaesthesia* (2015) 114(4): 576-587.

11. Ker, K. et al. “Does tranexamic acid prevent postpartum haemorrhage? A systematic review of randomised controlled trials” *BJOG* (2016) 123(11): 1745-1752.

APPENDIX 1: JW ADVANCE DECISION TO REFUSE SPECIFIED MEDICAL TREATMENT

Advance Decision to Refuse Specified Medical Treatment

1. I, _____ (print or type full name), born _____ (date) complete this document to set forth my treatment instructions in case of my incapacity. **The refusal of specified treatment(s) contained herein continues to apply to that/those treatment(s) even if those medically responsible for my welfare and/or any other persons believe that my life is at risk.**

2. I am one of Jehovah's Witnesses with firm religious convictions. With full realization of the implications of this position I direct that **NO TRANSFUSIONS OF BLOOD or primary blood components (red cells, white cells, plasma or platelets)** be administered to me in any circumstances. I also refuse to predonate my blood for later infusion.

3. No Lasting Power of Attorney nor any other document that may be in force should be taken as giving authority to disregard or override my instructions set forth herein. Family members, relatives, or friends may disagree with me, but any such disagreement does not diminish the strength or substance of my refusal of blood or other instructions.

4. Regarding end-of-life matters: [initial one of the two choices]

   (a) _____ I do not want my life to be prolonged if, to a reasonable degree of medical certainty, my situation is hopeless.

   (b) _____ I want my life to be prolonged as long as possible within the limits of generally accepted medical standards, even if this means that I might be kept alive on machines for years.

5. **Regarding other healthcare and welfare instructions** (such as current medications, allergies, medical problems or any other comments about my healthcare wishes):

_____

_____

_____

_____

_____

_____

_____

_____

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6. I consent to my relevant medical records and the details of my condition being shared with the Emergency Contact below and/or with member(s) of the Hospital Liaison Committee for Jehovah's Witnesses.

7. _____ _ _ _ _ _ _ _ _ _ _ _ _ _____
Signature NHS No. Date

_____
Address

8. **STATEMENT OF WITNESSES:** The person who signed this document did so in my presence. He or she appears to be of sound mind and free from duress, fraud, or undue influence. I am 18 years of age or older.

_____ _____
Signature of witness Signature of witness

_____ _____
Name Occupation Name Occupation

_____ _____
Address Address

_____ _____

_____ _____
Telephone Mobile Telephone Mobile

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9. **EMERGENCY CONTACT:**

_____
Name

_____
Address

_____

_____
Telephone Mobile

10. **GENERAL PRACTITIONER CONTACT DETAILS:** A copy of this document is lodged with the Registered General Medical Practitioner whose details appear below.

_____
Name

_____
Address

_____

_____
Telephone Number(s)

NO BLOOD

(signed document inside)

Advance Decision to Refuse Specified Medical Treatment

Advance Decision to Refuse Specified Medical Treatment

(signed document inside)

NO BLOOD

APPENDIX 2: CHECKLIST FOR SURGICAL PATIENTS REFUSING BLOOD / BLOOD COMPONENT SUPPORT (INCLUDING JEHOVAH'S WITNESSES)

	I ACCEPT: (✔ tick your choice)				
	Yes	No	Not Discussed	If required to save my life	
Red Blood Cells				Yes	No
Platelets				Yes	No
Fresh Frozen Plasma (FFP)				Yes	No
Cryoprecipitate				Yes	No
Albumin				Yes	No
Prothrombin Complex Concentrate (PCC)				Yes	No
Fibrinogen Concentrate				Yes	No
Immunoglobulin's (Anti-D)				Yes	No
Acute Normovolaemic Haemodilution				Yes	No
Intra-op Cell Salvage				Yes	No
Post-Op Cell Salvage				Yes	No
Fibrin glues & sealants				Yes	No
Other treatment (specify):				Yes	No

The checklist should be completed in full by the treating surgical team. Items not discussed on the first visit may be re-initialed by patient after appropriate discussion. The checklist should include the following statements to be signed by the patient indicating that:

- The patient has confirmed *understanding & agreement* with all the above statements
- The patient has also confirmed understanding that this document will *remain in force & binding to all those involved* in his/her care until he/she personally revokes it either verbally or in writing.
- The patient is signing the relevant document of his/her *own free will*.

Patient Name: _____ Signature: _____ Date: _____

Consultant Name: _____ Signature: _____ Date: _____

APPENDIX 3: REFUSAL OF BLOOD NOTIFICATION FORM

APPENDIX 3: REFUSAL OF BLOOD NOTIFICATION FORM

Elective patients refusing red blood cells or/& other blood products (including Jehovah Witnesses)

- Please complete in conjunction with the Care Pathways & Check llist in Appendix 2
- Please forward completed forms to on-call Haematology Dr ideally within 6 weeks of operation (if applicable)

Patient details						
Surname			**Forename**		**Date of Birth**	
NHS Number			**Hospital Number**			
Operative details						
Consultant			**Specialty**		**Hospital**	
Pre-operative assessment date			**Operation date**			
Planned Operation						
Estimated Blood Loss		**Anticoagulation meds?**	**Warfarin**	**Heparin**	**Aspirin**	**Other (state)**
Documentation & tests						
Advance decision document valid & signed?				**Checklist completed & signed?**		
Essential Blood Tests done?						

Completed by: _____ Signature _____

Role _____

Date _____

Full version control record

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This guideline has been registered with the trust. However, clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt, contact a senior colleague or expert. Caution is advised when using guidelines after the review date. This guideline is for use in Frimley Health Trust hospitals only. Any use outside this location will not be supported by the Trust and will be at the risk of the individual using it.

Version Control Sheet

Version	Date	Guideline Lead(s)	Status	Comment
1.0	February 2021	Lucy Mant, ST4 in Obstetrics & Gynaecology	Final	First cross site version
1.1	May 2021	Lucy Mant, ST4 in Obstetrics & Gynaecology	Interim	Information leaflet added as an appendix
1.2	December 2021	Lucy Mant, ST4 in Obstetrics & Gynaecology	Interim	Dr Y Shivakaran added appendices and updated links.
2	May 2024	Negin Sadeghi, Olufemi Eniola	Final	Full review and update Ratified at OCGC 01/10/2024

Related Documents

Document Type	Document Name
Trust Policy	Blood Transfusion Policy for Adults with Related Guidelines
Guideline	Postpartum haemorrhage
Guideline	Refusal_of_Blood_Components