REF:CTM obs 140

Guideline for the Care of Women who decline blood transfusion During Pregnancy, Labour, and Postnatal period

Initiated By	Cwm Taf Morgannwg University Health Board Obstetrics and Gynaecology Directorate
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AUTHORSHIP, RESPONSIBILITY AND REVIEW

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Disclaimer

When using this document please ensure that the version is the most up to date by checking the Obstetrics & Gynaecology Guidelines on WISDOM

Contents

Purpose

The purpose of this guideline is to provide advice to health professionals caring for women who decline blood transfusion.

It is for guidance only in relation to the wishes of the woman and planning for birth. If it is known in advance that a woman is likely to decline blood or blood products, it is important to clarify which blood products the woman will decline and which, if any, she will accept. It is not intended to be used as a guide for care management or blood product usage in an emergency situation. For this information, please access the relevant guidelines *obstetric haemorrhage guidelines include a protocol for women refusing a blood transfusion surgical management of PPH early recourse to hysterectomy*

Background

Most women who decline blood transfusion are Jehovah's Witnesses, who believe that the Bible forbids the transfusion of blood. This is a deeply held core value and they regard a non-consensual transfusion as a gross physical violation (RCOS 2002).

Witnesses view them as ruling out transfusion of whole blood, packed red blood cells, white blood cells, plasma, and platelets. However, Jehovah's Witnesses' religious understanding does not *absolutely* prohibit the use of blood products, such as cryoprecipitate such as albumin, clotting factors, and immune globulins. For this reason, each Jehovah's Witness should have completed an Advanced Decision Document *refusing blood components along with a checklist* which clearly states which products they will and will not accept, as this may be different in each case. This also releases Health Professionals and their employers of responsibility for any damages that might be caused by their refusal of blood.

Refusing blood does not make Jehovah's Witnesses anti-medicine. There are many effective non-blood medical alternatives to allogeneic blood. For example, non-blood volume expanders are acceptable, and re-infusion of their own blood is often permitted by many Witnesses via the use of Cell Salvage.

Obstetric haemorrhage is often unpredictable and can become life threatening very rapidly. Significant obstetric haemorrhage is an emergency which must be treated promptly in all patients (see Obstetric haemorrhage guideline). In most cases blood product usage are required to save the woman's live and very few women decline blood transfusion in these circumstances. If it is thought likely that a woman may do so, the management of massive haemorrhage should be considered in advance.

Support and assistance can be obtained from the local Hospital Liaison Committee for Jehovah's Witnesses (CONTACT DETAILS ON PAGE 19). Further information can be obtained from the "Care plan for Women in Labour Refusing a Blood transfusion" (Ref: RCOG News, and department of health guideline website, and RCOS code of practice).

Booking for Maternity Care

Documentation in Handheld maternity notes and care plan: At the booking appointment all women should be asked if they have any objections to receiving a **blood transfusion or blood products**. If a woman is a Jehovah's Witness or likely to decline blood transfusion for other reasons, their answer should be clearly documented in the **dedicated space** in hand held maternity case notes.

Women who decline blood transfusion who are not Jehovah's Witnesses should be encouraged to have their wishes clearly documented by the treating team.

Referral: If women would decline blood products, she must be referred to Consultant Obstetrician for review at 16 weeks, and she should be booked for delivery in a unit, which has all facilities for prompt management of haemorrhage, including hysterectomy.

Blood status:

Blood group and antibody status, haemoglobin and ferritin are checked in routine, in addition to folate and B12 levels.

If the patient is rhesus negative, the use of anti D and potential implications of declining anti D should be discussed at their antenatal clinic appointment with consultant. She should also be informed that anti D is a fractionated blood product/blood fraction. Her decision regarding whether she would accept fractionated blood products like anti D should be documented.

A plan of care: for pregnancy should be discussed and documented in document called "Refusal of blood or blood products care plan" (see appendix 4). This document should be secured in women maternity hand held notes and is completed throughout the **pregnancy, labour and postnatal period.**

Patient information:

The woman should be given all information about risk of refusing blood transfusion in a non-judgmental manner. (Leaflet: Women who decline blood and blood products in pregnancy" – see Appendix 3). She should be advised that if massive haemorrhage occurs there is an increased risk that hysterectomy may be required.

Advance decision document: The woman should be asked if she has a signed Advanced Decision Document, if not, she should be advised to **complete a new one, as pregnancy is a life-changing event**

Information can be found using the link below;
https://www.gmc-uk.org/-/media/documents/personal-beliefs-and-medical-practice-20200217_pdf-58833376.pdf

Consultant visit at 16 weeks:

Documentation and discussion of care plan:

The woman should be asked **to identify** acceptable and unacceptable treatments for Jehovah's Witness (see list in Appendix 1). These should be clearly documented and signed on "**checklist** for acceptance of blood or blood products" (see appendix 2, and file in her handheld notes).

Risk of refusing blood transfusion/primary blood products/and the non-primary blood products and the consequences to short term and long-term health should be discussed in a non-judgmental manner. She should be advised that if massive haemorrhage occurs there is an increased risk that hysterectomy may be required, and that there is a risk of death.

This will provide an opportunity to discuss her **Advance Decision** Document and counsel her.

Specific instructions regarding the woman's **care in labour** should be documented on care plan in the maternity handheld notes.

Cell Salvage:

Consent for this procedure should be sought and documented early in the pregnancy. Some Jehovah's Witness will accept cell salvage and this must be clarified with the theatre team and documented on the checklist (see appendix 2 – checklist for patient ≥ 18 years, who decline blood transfusion). Where this is sought the UKCSAG Technical Factsheet will provide step-by step guidance (see Appendix 5).

Referral: for anaesthetic review.

Information leaflet:

Check if she has received information leaflet (Leaflet: Women who decline blood and blood products in pregnancy" – see Appendix 3).

Blood status:

Check results of booking bloods (Blood group, antibodies, Hb, ferritin, folate and B12).

If Rhesus negative: If the patient is rhesus negative, the use of anti D should be discussed, and woman is informed that this is a blood product. The potential implications of declining anti D should be discussed at their antenatal clinic appointment with consultant. Her decision regarding whether she would accept fractionated blood products like anti D should be documented.

Antiplatelet agents and anticoagulants: these should only be prescribed if the benefits outweigh the risks.

Antenatal Care

Care of pregnancy in women who decline blood transfusion, requires multi-disciplinary input (Midwife, Obstetrician, Anaesthetist, Cell Salvage team +/- Haematologist).

An ultrasound scan: should be carried out to identify the placental site at the time of anomaly scan.

Blood group and antibodies: The woman's blood group and antibody status should be checked in the usual way when booking bloods are taken.

Haemoglobin, ferritin, B12 and folate:

Haemoglobin should be checked at booking, 28 weeks and 36 weeks. **Haemoglobin should be maximised to at least 130 g/L**. (Association of anaesthetist 2018 Guideline – Anaesthesia and Perioperative Care of Jehovah's Witnesses and patients who decline blood, p2, recommendation3).

An initial check for B12, folate, transferrin and ferritin should be undertaken at booking, and these should be repeated if anaemia develops.

Patients with borderline low ferritin levels (30-200ug/L) should be started on low dose **oral iron** to try and prevent the development of iron deficiency.

Ferritin levels	Starting dose of Oral Ferrous fumarate
< 30ug/L	Ferrous fumarate 200 mg BD
30 -200ug/L	Ferrous fumarate 200mg OD
>200ug/L	Does not need oral iron supplementation

Any patient taking oral iron should have their **Haemoglobin and ferritin** rechecked 2-3 weeks after commencing treatment. Correct way to take iron i.e with vitamin C, avoid taking interactive medicines at the same time as iron (e.g. antacids), or taking on an empty

stomach. Women should be counselled about common side effects of oral iron (e.g constipation, nausea) and to seek medical advice if these occur as interventions such as use of laxatives (for constipation) or take iron tablet with food (to reduce nausea) can be advised.

Monitoring for adequate response is essential, and if inadequate response is observed the response explored; tolerability and compliance should be checked, and it is important to rule out other causes for lack of response/anaemia, such as malabsorption, blood loss, renal/liver disease, and other deficiencies.

If a patient is iron deficient, and this is causing anaemia despite of taking oral iron, consider intravenous iron infusion with caution and follow the hospital guideline for this.

Haematologist

Discuss the case with haematologist if any concerns or if IV iron is not effective.

Consider the following before further intravenous iron transfusion and discussion with Haematologist

1. Regular full blood count
2. Blood film
3. Reticulocyte count
4. Iron studies (written on the form as transferrin/ferritin/iron)
5. Write on form for attention of haematologist

Blood film is key to determining if further iron transfusion is needed

Caution: The Medicine and Healthcare Products Regulatory Agency (MHRA 2014) has issued the following statement on the use of IV iron infusion in Pregnancy:

"Iron deficiency anaemia in the first trimester of pregnancy can usually be treated with oral iron (i.e. IV iron should not be used).

Later in pregnancy, any benefits of using IV iron should be carefully weighed against the risk of anaphylactic reactions which could have serious consequences for both mother and fetus."

Birth:

- Women should be actively encouraged to give birth in a setting where early intervention and management of Post Partum Haemorrhage (PPH) can be undertaken.
- Women who decline blood products but who are otherwise experiencing an uncomplicated pregnancy and who would meet the criteria of the All Wales Clinical Pathway for Normal Labour (AWCPNL) may consider an alongside midwifery led setting (AMU) which is co-located in a hospital setting. This is likely offer benefits such as reduced intervention, whilst also offering early intervention in the event of abnormal bleeding.
- There is good evidence, which demonstrates a reduction in obstetric interventions associated with birth in midwife-led settings (including assisted birth, episiotomy and caesarean birth, Birthplace study 2011). A reduction in these type of interventions is also likely to reduce the likelihood of PPH scenario.
- If a woman declining blood products with otherwise uncomplicated pregnancy was admitted to the AMU or midwife-led area, this should be communicated to the MDT on duty to ensure effective communication and handover
- Women planning birth within a home or freestanding midwife-led unit (FMU) setting will require individualised care planning and would be birthing outside of recommended guidance

Labour

Specific instructions regarding the woman's care in labour should be documented on care plan in the maternity handheld notes.

Admission and observation: The on call obstetric and anaesthetic registrar must notify the on call obstetric and anaesthetic consultants when a woman who has declined blood or blood products is admitted in labour.

The woman may choose to wear a "no blood" wrist band to highlight her refusal, which she will bring with her. (RCOG Green Top Guideline 47, p8, recommendation no 10).

The labour should be managed routinely by experienced staff. On admission, a senior obstetrician should review the woman's care plan and develop a final plan of care for labour, which should be documented in clinical notes. **There should be low threshold for seeking senior advice**.

Routine PPH Risk Assessment should be carried out. If appropriate, and the woman will accept it, the use of a cell salvage system could be anticipated and organised in good time before an emergency arises. Consider using for an instrumental / vaginal birth in theatre.

The midwife caring for the woman should be asked if she has an Advance Decision Document and should be aware of her wishes at that time, although she has the right to change her mind.

Caesarean section: Vaginal delivery is associated with less blood loss than caesarean section and therefore LSCS should only be performed if there is a clear maternal or fetal indication.

All relevant issues should be highlighted at the time of team briefing and during the WHO Safety checklist before the start of anaesthesia. Cell salvage should be used if the patient consents.

If elective caesarean section – ensure consultant obstetrician available on planned day of caesarean.

In case of emergency caesarean – the on call consultant obstetrician should be informed and should be present at the procedure where possible. In an emergency, the most experienced surgeon available should carry out the procedure, knowing that the on call consultant is en-route to obstetric theatre.

Cord clamping: delay cord clamping when not contraindicated, keeping the baby at or below the level of the placenta until the cord is clamped.

Third stage: The third stage of labour should be actively managed. **There should be lower threshold for using an IV oxytocin infusion for management of the third stage**.

Postnatal:

The woman should be closely observed, and her vaginal blood loss monitored on the delivery suite for a minimum of 1 hour post-delivery. She must be monitored vigilantly in postnatal ward/period. Staff must ensure that her care is effectively communicated **at each handover** and attention must be paid to any concerns over bleeding or apparent increase in lochia.

Discharge from hospital:

The staff must communicate effectively with GP about any necessary follow up. The woman should be advised to report promptly if she has any concerns about bleeding during the puerperium.

Treatment of Haemorrhage

OBS Cymru: Manage as per OBS CYMRU 4 stage major haemorrhage protocol, incorporated within "Postpartum haemorrhage guideline"

Vigilance, speed and ask for help: The principle of management of haemorrhage in these cases are to **AVOID DELAY** and to call for senior assistance early. Rapid decision making may be necessary, particularly regarding surgical intervention.

Inform Obstetric, anaesthetic and haematology consultants early:
If unusual bleeding occurs at any time during pregnancy, labour or the puerperium, the consultant obstetrician and anaesthetist should be informed, and the standard management should be commenced promptly. The consultant haematologist should also be notified, even though the options for treatment may be severely limited. Consultant anaesthetics and haematologist are normally involved in the treatment of massive haemorrhage.
The threshold for intervention should be lower than in other patients.

In the event of a significant antepartum haemorrhage, emergency delivery by caesarean section should be considered early.

Fluid resuscitation: Judicious use of IV fluid resuscitation has a vital role.

Remember Coagulopathy:
Early consideration should be given for possibility of coagulopathy. Extra vigilance should be exercised to quantify any abnormal bleeding/concealed bleeding and to detect complications, such as clotting abnormalities, as promptly as possible.

Keep the woman and/or partner informed: The woman should be kept fully informed about what is happening.
Information must be given in a non-judgmental way. If standard treatment is not controlling the bleeding, she should be advised that

blood transfusion is strongly recommended. Any patient is entitled to change their mind about a previously agreed treatment plan.

Consent: The doctor must be satisfied that the woman is not being subjected to pressure from others. It is reasonable to ask the birth partner(s) to leave the room for a while so that the doctor (with a midwife or other colleague) can ask her whether she is making her decision of her own free will. Likewise, the woman may ask for the company of a relative or member of Jehovah's Witnesses church to support her as she considers her decisions.

If she maintains her wish to decline blood or blood products, her choice should be respected. The legal position is that any adult patient (i.e. 18 years old or over) who has the necessary mental capacity to do so is entitled to decline treatment, even if it is likely that refusal will result in the patient's death. No other person is legally able to consent to treatment for that adult or to decline treatment on that person's behalf. Please also see CTMUHB Consent Policy http://cthb-intranet/Docs/Clinical/General%20Clinical%20Policies%20and%20Procedures/Consent%20Policy%20-%20Final%20Version%202%20%20151015.pdf

The staff must maintain a professional attitude. They must not lose the trust of the woman or her partner as further decisions - for example, about hysterectomy – may have to be made.

Pharmacological interventions/haemostatic agents: includes:

Anti-fibrinolytic (Tranexemic Acid) 1gram TDS IV. Also consider IV vitamin K.

Desmopressin and Vasopressin: has also been recommended.

Fibrinogen concentrate (RiaSTAP), is plasma derived alternative to cryoprecipitate. It enhances clot strength and is used to normalize coagulation in postpartum haemorrhage. ROTEM: Give Fibrinogen 4g if the Fibtem A5 is 7-11mm and 6g if <7mm

Prothrombin complex concentrate/PCC (Beriplex and Octaplex) as an alternative to FFP, to be considered only after consultation with haematologist. Dose is 15-20 U/kg.

Tissue sealants (FloSeal or Tisseel) are plasma derived and may therefore not be acceptable to all patients who decline blood products. These are fibrin sealant surface agents which are useful adjunct to control surface bleeding in life threatening situations and in case of failure of other strategies

Recombinant factor VIIa (Novo seven) may be considered if all other options have failed (unlicensed use). The manufacturers warn against its use due to risk of arterial thrombosis, and it may contain traces of animal serum protein. Consider this option under guidance of consultant for life threatening PPH unresponsive to standard treatments. 90ug/kg provides site specific thrombin generation, repeat if unresponsive. To avoid possible failure of recombinant factor VIIa, ensure fibrinogen levels are adequate, and use anti fibrinolytic (Tranexamic acid acid) to stabilize the clot beforehand. Also correct acidosis (pH <7.2) and hypothermia which decrease the efficacy of recombinant factor VIIa.

Antepartum Haemorrhage: In the event of a significant antepartum haemorrhage where the foetus is still alive, emergency delivery by caesarean section should be performed early with mother's consent.

Non inflatable antishock garment: (Not available locally)

Surgical interventions: In event of massive post-partum haemorrhage follow the PPH guideline. Early decision for surgical

interventions such as B-Lynch suture, Bakri intrauterine balloon, and bilateral ligation of uterine or internal iliac arteries should be considered.

Hysterectomy: Hysterectomy is normally the last resort in the treatment of obstetric haemorrhage, but with such women delay may increase the risk. The woman's life may be saved timely by hysterectomy, though even this does not guarantee success.
The **timing** of hysterectomy should be decided by on call consultant. When the hysterectomy is performed the uterine arteries should be clamped/ligated as early as possible during the procedure.
Interventional radiology:
Consider the involvement of interventional radiologist – case-by-case consideration. Interventional radiology may only be available with elective procedures

Management of postpartum anaemia:

Consider **IV iron with B12 and folic acid** for severe anaemia, as oral iron may have limited absorption and adverse gastrointestinal effects. The Hb increase in 1 week on IV iron is considerably faster than oral iron, and comparable to 2 units of blood transfusion.
IV iron preparations have a very low level of life threatening adverse drug events. Four preparations are currently available in UK – Venofer, Cosmofer, Ferinject and Monofer.

Erythropoietin (EPO): is an erythropoiesis stimulating agent. It is not an alternative to red cell transfusion in major haemorrhage. It takes 10-14 days to increase haemoglobin levels (although evidence suggests can increase much earlier) (Centre of Maternal and Child Enquiries report "saving Mother's Lives 2006 – 2008). This should be explained to patient. It can be used with or without IV iron in cases

of life threatening anaemia (unlicensed) or where patient is unresponsive to IV iron.

Dose:

Epoetin alpha or beta, 300 units/kg/day IV.

Darbepoietin (Aranesp) 6.75 micrograms/kg IV as an initial dose and then weekly or less frequently depending on response.

Cautions, contraindications and side effects:

http://emc.medicines.org.uk/

Note

Rate of response to r-HuEPO (EPO) is dose dependent and varies among patients. Poor response may be overcome by dose escalation.

http://www.ncbi.nlm.nih.gov/pubmed/7580701

In the Event of a Death

If, in spite of all care, the woman dies, her relatives require support like any other bereaved family.

It is very distressing for staff to have to watch a woman bleed to death while refusing effective treatment. Support should be promptly available for staff in these circumstances. (Please also see CTMUHB Maternal Death Guideline).

Hospital liaison committee for Jehovah's Witnesses – able to help and their contact details can be found on the last page of this guideline.

References

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11. JW.ORG Medical Information for Clinicians https://www.jw.org/en/medical-library/
12. Useful contact details

Local Hospital Liaison Committee for JW Patients
info@hlcwales.org
www.hlcwales.org
Terry Reed – 07815646145
Wayne Bevan – 07854033312
Luke Stevens – 07518145514

Head office 24 hours
02083713415
His.gb@jw.org

Best Practice points

1. Ensure that the woman is given full information of risks, benefits and alternatives regarding the use/need for blood and blood products.

2. Early referral in pregnancy for consultant led care.

3. Aim to maximise haemoglobin to above 130g/L.

4. Ensure that both the CTMUHB Women who Decline Blood or Blood Products, Care plan and Checklist are completed and filed in the woman's hand held notes.

5. Have a low threshold for calling for consultant advice.

6. Ensure that the on call obstetric and anaesthetic consultants are informed when the woman is admitted in labour.

7. If haemorrhage occurs **AVOID DELAY**. Ensure senior assistance is summoned early; rapid decision-making may be necessary, particularly with regard to surgical intervention. If bleeding early intervention should be considered to prevent significant blood loss

APPENDIX 1

Acceptable/Choice/Unacceptable Treatment for Jehovah's Witnesses
Acceptable Treatments: Jehovah's Witnesses accept most medical treatments, surgical and anaesthetic procedures, devices and techniques, as well as haemostatic and therapeutic agents that do not contain blood.
They will accept:
• Non-blood volume expanders such as crystalloids (e.g. Saline, Hartmann's, Dextrose) and colloids (e.g. Gelatin, Hetastarch);

• Techniques such as hypotensive anaesthesia, meticulous haemostasis and diathermy;

• Agents such as ESAs (e.g. Erythropoietin), Desmopressin, Tranexamic acid, vasoconstrictors

• Non-blood derived topical haemostatic agents (e.g. Surgicel, Celox)

• Blood tests

Matters of Patient Choice: Each Witness will decide whether she wishes to accept the following as a matter of personal choice. ***Hence it is essential to discuss with each patient whether or not these procedures are acceptable:***
• Autologous procedures including intra and postoperative cell salvage, haemodialysis.

• 'Fractions' of plasma or cellular components (e.g. immunoglobulins including anti-D, clotting factors, PCCs, albumin, plasma-derived vaccines, cryoprecipitate, factor VIIa and RiaSTAP®, Fibrinogen Concentrate)

• Topical haemostatic agents such as Tisseel (contains plasma-derived fibrin)

• Serums

• Blood patches (i.e. by anaesthetist)

Unacceptable Medical Treatments:
• Transfusions of whole blood, packed red cells, white cells, plasma and platelets

• Preoperative autologous blood collection and storage for later reinfusion.

• Elective termination of pregnancy (if, at the time of childbirth, a choice must be made between the life of the mother and the child, those concerned will make a personal decision).

APPENDIX 2 – CHECKLIST

CHECKLIST FOR PATIENTS 18 YEARS AND OVER WHO REFUSE BLOOD TRANSFUSIONS		
Patient Name	Address	Date of Birth
		Telephone

In order to assist my treating team, I set out below the treatments I am willing to accept (where clinically indicated) during my hospital stay, procedure, or delivery:

	TREATMENTS	WILLING TO ACCEPT?	
1.	**NON-BLOOD THERAPIES / AGENTS**		
	Haematinics e.g. intravenous iron, oral iron, folic acid, vitamin B12	Yes	No
	Erythropoiesis-stimulating agents e.g. recombinant erythropoietin [EPO]	Yes	No
	Thrombopoietic agents e.g. Romiplostim, Eltrombopag	Yes	No
	Granulocyte Colony-stimulating Factor [G-CSF]	Yes	No
	Procoagulants e.g. desmopressin [DDAVP], vitamin K	Yes	No
	Antifybrinolytics e.g. Tranexamic Acid [TXA], Aprotinin	Yes	No
	Vasoconstrictors e.g. vasopressin	Yes	No
	Other? (specify)	Yes	No
2.	**AUTOLOGOUS PROCEDURES / STRATEGIES**		
	Intraoperative Blood Cell Salvage [ICS]	Yes	No
	Postoperative Blood Cell Salvage (from wound drainage)	Yes	No
	Autologous gels and sealants e.g. platelet gel, epidural blood patch	Yes	No
	Haemodialysis / haemofiltration	Yes	No
	Cardiopulmonary bypass	Yes	No
	Extra Corporeal Membrane Oxygenation [ECMO]	Yes	No
	Other? (specify)	Yes	No
3.	**BLOOD FRACTIONS / DERIVATIVES**		
	Cryoprecipitate	Yes	No
	Fibrinogen Concentrate	Yes	No
	Human Albumin Solution	Yes	No
	Immunoglobulins including Anti-D	Yes	No
	Tissue Sealants (plasma-derived) e.g. FloSeal, Tisseel	Yes	No
	Prothrombin Complex Concentrates [PCCs] e.g. Beriplex, Octaplex	Yes	No
	Recombinant Factor VIIa (synthetic, but may contain derivative traces)	Yes	No
	Other? (specify)	Yes	No
4.	**BLOOD / BLOOD COMPONENTS**		
	Plasma, Fresh Frozen Plasma, Octaplas, lyophilized plasma e.g. LyoPlas	Yes	No
	Platelets	Yes	No
	Red cells	Yes	No
	White cells	Yes	No
5.	**ADVANCE DECISION TO REFUSE TREATMENT [ADRT]**	*Completed?*	*Attached?*
	If an ADRT has been completed, attach a copy of the ADRT document	Yes / No	Yes / No

This form and any Advance Decision attached should be made available to all health professionals involved in my care.

Patient (Signature).....**Date**.....

Form Received By (Signature).....**Date**.....

Form Received By (Name & Designation).....

APPENDIX 3 – PATIENT INFORMATION TO BE PROVIDED AT BOOKING

CTMUHB, Blood declined in Pregnancy January 2019

This leaflet gives you information about your right to decline blood transfusion or blood products during your pregnancy.

If you are a Jehovah's Witness, you may have heard 'blood products' described as 'fractions.'

Can anyone decline a blood transfusion?
Yes. Cwm Taf University Health Board wants to be sure that we treat every woman in a way that recognises and respects their individual, cultural and religious beliefs.
As a Health Board we have a program to conserve blood and minimise the number of transfusions given to all patients. If you decline treatment with blood products, we want to ensure that you make an informed decision; your doctor or midwife will discuss the possible risks and benefits of treatment **with and without** blood products.

It is **your** decision whether or not you are willing to accept the risks refusing blood transfusion and blood products. If you are a Jehovah's Witness you may wish to discuss this with your ministers.

What if I am thinking of becoming pregnant?
You may wish to talk to a doctor before you conceive, so that you can find out more about how you will be cared for during you pregnancy and how to become as fit as possible prior to conception. Your General Practitioner (GP) can arrange for you to see a hospital specialist to discuss your options further.

What if I am already pregnant?
Once you are pregnant you should inform your GP and midwife that you DO NOT wish to receive a blood transfusion or blood products. **Please make your wishes clear in writing and ensure that they are included in you handheld maternity notes and your medical notes.**

If you are a Jehovah's Witness you may already carry an 'Advance Decision to decline Specified Medical Treatment' (sometimes known as a 'No Blood Form') or a 'Treatment Checklist' please show these documents to your obstetrician and midwife so that they can make copies and include them in your notes.

We also strongly recommend that you choose to have your baby in a Consultant-Led Unit, rather than a home birth or birth centre delivery. Your midwife will refer you to a Consultant Antenatal clinic where they will discuss your options and how you will be cared for during your pregnancy. Specific things that will be covered at this appointment are:

• Iron and folic acid supplements throughout your pregnancy.

• Regular blood tests will be taken to ensure that your haemoglobin (blood count) is above **130g**/L *[Association of Anaesthetists 2018 Guideline 'Anaesthesia & Perioperative Care for Jehovah's Witnesses and patients who refuse blood' p2, Recommendation 3]*, if

your haemoglobin remains low despite supplements, and you have low iron stores, we may recommend an infusion of 'liquid iron' into a vein.

• As for all pregnant women you have a detailed scan to check the position of the placenta (afterbirth), a low-lying placenta can increase your risk of bleeding during pregnancy.

• You will be able to discuss the risks and benefits of blood transfusion and blood products. If, **following this discussion, you confirm that you do NOT wish to receive blood and specified blood products this** will be clearly documented in both your medical notes and your handheld maternity notes.

• Other treatments and procedures to limit blood loss will also be discussed and it will be documented as part of your plan for care in your maternity notes.

• If you are at particular risk of bleeding, for example due to a low-lying placenta, we will discuss the use of blood salvage techniques.

• The anaesthetic department will be notified that you are pregnant and when your baby is due.

If your blood group is Rhesus negative we will recommend that you have Anti-D injections during your pregnancy and after delivery. Anti-D is a protein obtained from blood plasma, there is **currently** no non-blood derived alternative. If you are a Jehovah's Witness you may wish to discuss this with your local minister or a member of the **Hospital** Liaison Committee.

What happens during labour and after delivery?
When you come into hospital in labour, the consultant obstetrician and consultant anaesthetist will be made aware of your arrival. You will be looked after as normal in labour, however we recommend that you have an injection following delivery of your baby, to help with delivery of the placenta (active management of the third stage of labour). If there are risk factors for bleeding we recommend insertion of an intravenous drip so that urgent drugs may be given without delay. If there are any complications a senior team will be available and your care plan will be followed.
You can be confident that even in an emergency your wishes will be followed and you will receive the best possible care and treatment during your time on the maternity unit.

To help us respect your wishes:
• Inform us in writing that you do not wish to receive blood transfusion or blood products. This can be done by completing the Trust 'Checklist for Jehovah's Witnesses and Other Patients who Decline Blood Transfusion'.

• Carry an 'Advance Decision Form' with you at all times, so that if you **are** found unwell and cannot communicate, your wishes will be respected. You may wish to wear a 'No Blood' wristband.

• Before an operation you will sign a standard consent form, clearly indicating that you consent to the planned procedure but that you DO NOT consent to blood transfusion/products.

I have further questions…

If you have any further questions or concerns that are not covered by this leaflet please discuss them with a member of your medical team. If they are unable to answer your questions then we will find someone who can.
Further help is available for Jehovah's Witnesses from:

• Your local minister

• The Wales Hospital Liaison Committee for Jehovah's Witnesses. Contact details can be provided by a member of your medical team, or alternatively you can make contact by e-mail: info@hlcwales.org

APPENDIX 4
Care plan: Management of Women who decline blood or blood products in obstetrics

For full information on management, refer to CTMUHB: Management of women who decline blood or blood products in Obstetrics

Plan of Care	Sign	Date
Booking Visit		
Ascertain if the woman objects to blood or any blood products. If a woman is likely to decline blood products, this should be entered in the dedicated place in the hand held notes and on WCP clinical notes.		
Discussion should include risks and possible consequences of declining a blood transfusion; major haemorrhage, increased risk of requiring a hysterectomy, and potentially death if a life threatening haemorrhage **-** Discussion should also include the use of immunoglobulins, such as Anti D **-** Refer for Obstetric Consultant opinion, and booked in a Consultant unit with facilities for prompt management of haemorrhage. (Obstetric and Surgical expertise) **-** CTMUHB Women who decline the use of Blood or blood products Information Sheet given?		
At Consultant appointment:		
Consultant to discuss risks and possible consequences of declining a blood transfusion, major haemorrhage and increased risk of requiring a hysterectomy. **-** Refer to Anaesthetic Clinic for Anaesthetic Consultant review **-** Ensure CTM UHB Checklist for Blood Product Acceptance is completed, signed and filed in hand held notes		
Antenatal Care		
Blood tests (please document results)		
BOOKING - Woman's blood group: …….. - Antibody status: …….. - Haemoglobin: …….. - Serum ferritin (yellow tube): …….. - Folate (yellow tube): ……..…... - B12 (yellow tube): ……		

Plan of Care	Signature	Date
Plan of Care	**Signature**	**Date**
28 WEEKS - Antibody status: …….. - Haemoglobin*: …….. 36 WEEKS - Haemoglobin*: ……. *Repeat ferritin, folate, B_{12} if patient found to be anaemic		
Prescribe oral iron if required; Ferritin <30micrograms/L: 210mg ferrous fumerate BD Ferritin 30-200micrograms/L: 210mg ferrous fumerate OD		
Document placental site:		
Care in labour /Specific Instructions On admission in labour, senior obstetrician to review care plan and develop a final plan for labour, including mode of delivery, plans for cell salvage etc. (Refer to CTMUHB Women who decline the use of Blood Products guideline)		
Postnatal care		
Advise woman to report immediately any concerns about bleeding in the puerperium (both in hospital and at home)		

Appendix 5

UK CELL SALVAGE ACTION GROUP
TECHNICAL FACTSHEET

CELL SALVAGE IN JEHOVAH'S WITNESS PATIENTS

ICS Technical Factsheet Number 6

AREA of APPLICATION

Jehovah's Witnesses (JW) regard blood as sacred. On the basis of this deeply held core value, they decline treatment with allogeneic (donor) blood (red cells, white cells, platelets, and plasma). This is usually documented on an Advance Medical Decision that they carry on their person.

JW patients make a personal decision on whether or not to accept the various blood conservation measures available. These include intraoperative and postoperative cell salvage. Ideally, this should be discussed and recorded on a specific document, detailing exactly what is and is not acceptable to the patient.

JW patients who accept cell salvage may specifically request that the system be set up to allow for continuous connectivity. In these cases, the details outlined below should prove helpful. Informed consent should be sought as for all patients.

STAFF

The patient's surgical team and all staff involved in the cell salvage process.

PROCEDURE:

Setting up continuous connectivity
Although there will be technical differences between devices, the same general principles apply.

1. Set up the machine for collection and processing with standard disposables (in bowl-based machines consider using a low volume bowl to reduce blood stasis).

2. Prime the circuit with saline ensuring that saline enters the reinfusion bag and the collection reservoir (remember to account for this volume when recording the final reinfusion volume).

3. Attach an appropriate blood administration set to the reinfusion bag. Prime the administration set with saline and connect to the patient via a cannula for reinfusion. Once established, the connection between the patient and the reinfusion bag must not be broken. (Figure 1).

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4. Whilst surgery is ongoing, administer the saline at the slowest rate possible to maintain patency of the cannula until processed blood is available.

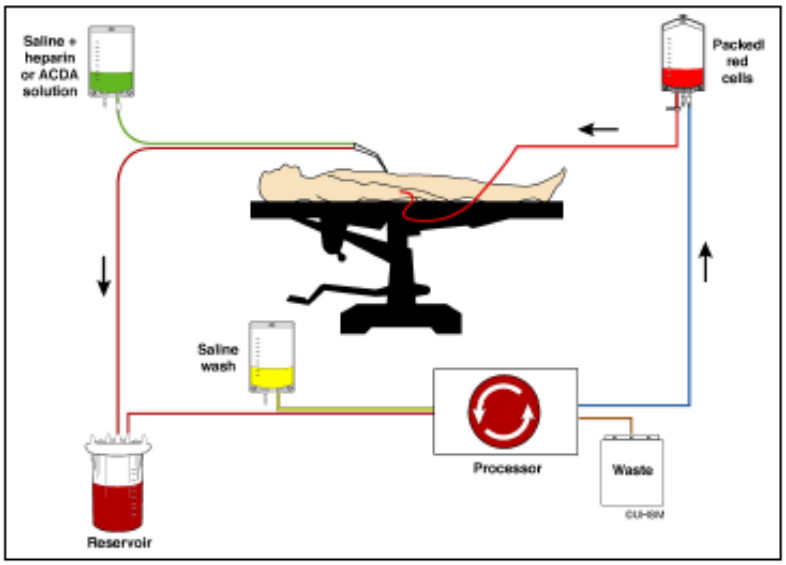

Figure 1. Representation of a continuous circuit

Special requirements

In some cases a leucocyte depletion (LD) filter may be needed for reinfusion of the salvaged blood. A standard giving set should be set up with a 3-way tap in line before blood collection begins. The giving set should be primed with saline to complete the circuit. When a volume of blood is ready to be reinfused, the LD filter can be spiked into the second reinfusion port on the reinfusion bag and primed. This is then attached to the 3-way tap, without breaking the continuous connectivity of the circuit. Likewise, because the filters have a maximum throughput of 450mls, a new filter can be added if necessary by replacing the original giving set while leaving the original filter connected. (Figure 2).

The LD filter should <u>not</u> be flushed with saline after filtration of the salvaged blood

When blood loss is rapid, the flow rate through the filter may not be sufficient to transfuse large volumes of blood quickly. Using a filter in each port will double the flow rate. During management of life threatening haemorrhage in a JW patient, if the reinfusion rate of salvaged blood is too slow, even when using two LD filters, it may be necessary to make a clinical decision to remove the LD filter from the circuit and replace with a standard blood administration set so that blood can be transfused rapidly to prevent exsanguination. This must be done without breaking continuous connectivity of the the circuit.

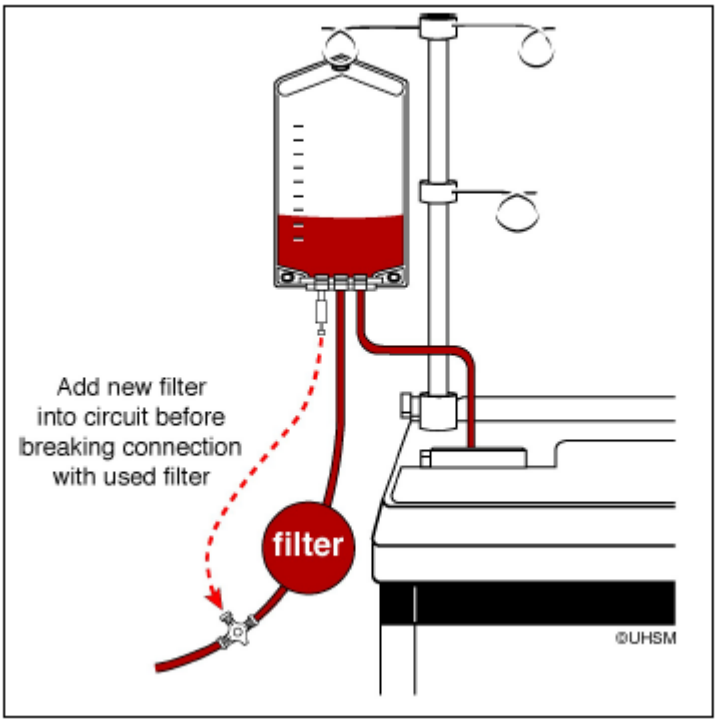

Figure 2. Replacing a filter without breaking continuity

This fact sheet has been verified by representatives of the Jehovah's Witness community.

The information contained in this ICS Technical Factsheet has been sourced from members of the UK Cell Salvage Action Group (UKCSAG) and is generally agreed to be good practice. The UKCSAG does not accept any legal responsibility for errors or omissions.

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