

Blood transfusion during pregnancy and birth

This leaflet explains why a blood transfusion may be necessary during pregnancy and birth.

General information about blood transfusions:

For general information on blood transfusions please use the following link to NHS Blood & Transport patient leaflet "Will I need a blood transfusion?"

<https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/14661/160511-27360-will-i-need-a-blood-transfusion-final.pdf> .

Why is blood important?

Blood is important because it supplies your body with the oxygen and nutrients it needs to function. Blood is made up of red blood cells, platelets and white blood cells in fluid called plasma. These components each have a different job to do:

- Red blood cells contain an iron-rich pigment called haemoglobin, which carries oxygen around the body. You need a certain level of healthy haemoglobin in your blood.
- Platelets help control bleeding by making the blood clot where there is a cut or wound.
- White blood cells fight infection and form the body's defence system (immune system).
- Plasma – a liquid that makes up most of the volume of blood; plasma contains many nutrients needed by the body's cells, as well as proteins that help the blood to clot if a patient is bleeding.

What is anaemia?

Anaemia is a condition where the amount of haemoglobin in the blood is below the normal level, or there are fewer red blood cells than normal.

In pregnancy, the body makes extra red blood cells to cope with the demands of the baby as well as those of the mother. Despite this, mild anaemia is common during pregnancy and your haemoglobin level will be routinely checked at your first pregnancy appointment and at 28 weeks.

Why might a blood transfusion be needed?

- **In an emergency situation:** When you haemorrhage (bleed very heavily), this is an emergency situation. As a result of this bleeding, you can become severely anaemic. Without a transfusion to replace the blood you have lost, you could die. A haemorrhage can happen:
 - Early in pregnancy if you have an ectopic pregnancy (when the pregnancy is growing outside the uterus) or a miscarriage;
 - After 24 weeks of pregnancy (ante partum haemorrhage);

- During birth (intrapartum haemorrhage);
- Immediately after birth (postpartum haemorrhage).

Even with excellent care in pregnancy and monitoring during labour, it is not possible to predict or detect every complication in time to prevent a life-threatening bleed. Surgical techniques and medication will be used to try to limit the need for a blood transfusion but a blood transfusion might be needed to save your life or to prevent serious harm to your health and your baby's health.

- **In a non-emergency situation:** You may also be offered a blood transfusion in a non-emergency situation when:
 - You have moderately severe anaemia in late pregnancy. There is a risk that, if you bleed even a small amount during birth, you may become severely anaemic.
 - You have a blood condition, such as sickle cell disease or thalassaemia; it affects your body's ability to produce healthy haemoglobin. You have an increased risk of developing severe anaemia when you become pregnant.
 - You have anaemia immediately after birth; you may be offered a blood transfusion, depending on your symptoms

Having a blood transfusion – how safe is the blood I get?

Information can be found at: <http://www.blood.co.uk>.

Making the decision to have a blood transfusion

If a blood transfusion is recommended in a non-emergency situation, make sure you have all the information you need to make an informed decision. Ask for information about all your options. If you have any concerns about having a blood transfusion, speak with your obstetrician or midwife.

What happens in an emergency?

In an emergency your doctors need to act immediately. Your obstetrician, anaesthetist and haematologist (a doctor who specialises in the treatment of diseases of the blood) will make an informed decision on your behalf for you to have a blood transfusion.

What if I want to refuse a blood transfusion?

You may decide you do not want to have a blood transfusion. This may be because of personal reasons or because of religious beliefs.

During pregnancy you should be asked if you have any objections to having a blood transfusion. A management plan should be made for your pregnancy, labour and birth. If you make a decision to refuse a blood transfusion under any circumstance (usually due to religious beliefs) then you will need to meet with the anaesthetic and obstetric consultants. You will need to discuss your wishes in person and sign a special consent form that explains your wishes to refuse blood products. You need to be clear that you understand the potential consequences of

refusing a blood transfusion in an emergency scenario where your life is at risk. Should the need for a blood transfusion arise, your doctors will respect your wishes.

So long as you have the ability to do so, you can change your mind at any point about the use of blood. You should not feel as though you have to stick rigidly to your original decision.

Is a blood transfusion my only option?

- **Iron supplements:** If you have anaemia because of blood loss or lack of iron, you may be offered iron supplements or an iron infusion to restore your haemoglobin level instead of a blood transfusion. Iron supplements can be taken as tablets, but some women will be advised to consider receiving iron through a drip. You may also need to take folic acid, in addition to taking iron, to raise your haemoglobin level.
- **Storing your own blood for a future transfusion:** It is not possible to store your own blood for transfusion during pregnancy.
- **Replacing your own lost blood back into your bloodstream (cell salvage):** If you have a planned Caesarean birth, the doctors may be able to collect the blood lost and replace this back into your bloodstream. Trained staff and specialist equipment are required for this, which may not be available at the RBH at all times, as additional staff have to be on duty.

What can I do to prevent anaemia?

To produce healthy haemoglobin, the body needs (among other things) iron, vitamin B12 and folic acid. If there is a lack of one or more of these, you become anaemic. The additional demands of pregnancy can increase the risk of anaemia. There are some positive steps you can take to ensure that you do not become anaemic during this time. You can do this by:

- Having a varied diet.
- Having enough iron in your diet (iron-containing foods include meat, poultry, eggs, vegetables and cereals).

Useful links

- A glossary of all medical terms is available on the RCOG website at <https://www.rcog.org.uk/en/patients/medical-terms/>
- National Blood Service for England and Wales www.blood.co.uk
- Receiving a Transfusion, NHS Scotland <https://www.scotblood.co.uk/about-blood/blood-transfusions/>
- Jehovah's Witness – local representatives

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

J Siddall (Consultant Obstetrician), July 2003

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