

# Receiving a transfusion

A patient's guide



### Why might a transfusion be needed?

Transfusions are sometimes given to replace any blood you lose during or after surgery; this is quite normal. Less than half of our patients having routine surgery will need a transfusion. If only a small amount of blood is lost, your body will naturally replace the lost blood over the first few weeks of your recovery.

To help reduce the chances of you needing a transfusion during your operation, the surgical teams will be using modern techniques and medicines to reduce the levels of any bleeding. However, if you lose more blood than your body can cope with, the surgical team may decide that it is in your best interest to have a transfusion; a decision which will be based on careful consideration and assessment.

Prior to your surgery a number of blood tests may be done. One of these blood tests will be to check that your iron levels are adequate to enable your body to make up naturally for any blood loss. If your iron levels are found to be low, you may be contacted prior to surgery to arrange further investigations or treatment. Treatment may involve taking an oral iron supplement or having an iron infusion which is given into a vein, a bit like a drip.

Although most transfusions are of the red cells which carry oxygen, you may need other cells called platelets, or some of the fluid (plasma) from blood which helps your blood to clot, which helps prevent major blood loss.

If you have been admitted for a reason other than surgery, blood tests may show that your blood cell levels are low and a transfusion may be necessary. There are a variety of causes for blood cell levels to be low and the doctor looking after you should explain to you why you may need a transfusion.

## Are there any risks from a transfusion?

All blood donors in the UK are unpaid and their health is checked before they are allowed to donate. Additionally, every blood donation is tested individually to ensure that it meets the highest standards. The main reason for testing is to detect infections that are known to be carried in the blood. These include HIV, the virus that causes AIDS, and also hepatitis B and C. The current risk of a transfusion being infected with HIV is less than 1 in 6.5 million; the risk of a transfusion being infected with hepatitis B is less than 1 in 1.3 million and hepatitis C less than 1 in 28 million. To put this in perspective, you are more likely to die in a gas incident (fire, explosion or by carbon monoxide poisoning) than to get hepatitis B from a blood transfusion.

Statistically, the risk of contracting variant Creutzfeldt-Jakob (vCJD) from a blood transfusion is low. Each year approximately 2.5 million units of blood are transfused in England, but there are just a handful of cases where patients are known to have become infected with vCJD from a blood transfusion.

At the time of going to print there is no screening test available for vCJD. As a preventative measure the national blood service excludes anyone from donating blood if they themselves have received a transfusion in the UK since 1980, as this is when it is believed vCJD entered the UK food chain.

There is also a very small risk that when you receive a transfusion this will result in your circulation being overloaded with fluid, a condition referred to as transfusion-associated circulatory overload (TACO). If this happens it can affect your breathing

The medical staff will assess you before your transfusion and if you are at risk, they will take appropriate actions to reduce this risk, such as transfusing you more slowly. The occurrence of TACO in Royal Papworth patients is a very rare event.

One of the important risks from receiving a blood transfusion is being given the wrong unit of blood. It is very important that the members of staff taking your blood samples or giving you your transfusion are able to identify you correctly. To ensure this happens you should be wearing a patient ID band with your correct name, date of birth and unique identification number on.

If you do not have one of these, ask your doctor or nurse to ensure you are fitted with one before you are given your transfusion. The staff taking your sample or giving you your transfusion should also ask you to tell them your name and date of birth, if you are able to do so, before samples are taken or each unit of blood is given.

There is a small risk that you may have a reaction to any transfusion you receive. The staff who are administering your transfusion receive training to enable them to deal with such an event if it starts whilst you are an inpatient.

Some reactions may however be delayed and begin several weeks after discharge. It is important that if you feel unwell at any time after you go home, you seek advice from your NHS walk-in centre, GP or emergency department and let them know that you have had a recent blood transfusion. When you are discharged, you will be given a discharge summary which will confirm whether or not you have received a transfusion.

Everyone involved in your blood transfusion at Royal Papworth Hospital has undergone very high standards of training and strict procedures are in place to ensure your safety.

Due to previous treatment or illness, some patients require blood which has undergone a special treatment called irradiation as they may be at risk from a rare but serious complication of transfusion called transfusion-associated graft versus host disease (TAGvHD). You will be asked questions during the admission process to identify whether you need irradiated blood; examples include patients who have a history of Hodgkin's disease or those who have had a stem cell transplant.

Please inform the doctor or nurse looking after you if you are aware that you have any special blood transfusion requirements.

# Do I have to agree to have a blood transfusion?

If you agree to have a transfusion, you are required to provide verbal consent. If the urgency of the situation means you are not able to so, the medical team will treat you in accordance with your best interests. Any consent you do provide should be documented in your medical records by the medical team looking after you. To enable you to provide valid consent it is important that you understand the risks and benefits of any transfusions you may receive.

If there is anything within this leaflet, or the information provided by the medical teams that you don't understand, please ask for further explanation.

You do have the right to refuse a blood transfusion, but it is very important that you understand fully the consequences of this. Please discuss this with the doctor looking after you. Some medical treatments or operations cannot be carried out safely without a blood transfusion being given.

#### Are there any alternatives available to me other than having to have a transfusion?

In some cases it may be possible for you to be offered an alternative to transfusion such as cell salvage which is a form of recycling your own blood which you may have lost during or after your operation. However, alternatives such as cell salvage are not suitable for every patient and any requests should be discussed with your doctor before your operation.

# What can I do to reduce the need for a transfusion?

If you do not eat enough foods containing iron, you may have low iron levels. Low iron levels can cause anaemia which may increase the need for a transfusion. Eating a varied and balanced diet should provide an adequate iron intake because iron is found in a variety of foods. In the UK the main sources of iron in your diet come from cereal, cereal products, meat, meatbased foods and vegetables.

You can speak to your GP or practice nurse about how to make sure you are eating a balanced diet which contains adequate amounts of iron.

#### **Data collection**

At Royal Papworth Hospital we have a system for recording any transfusions a patient may receive. We continually review our processes to ensure that our patients always receive the best treatment possible.

## What if you want further information?

Please ask a doctor or nurse for additional information. Royal Papworth Hospital also has a specialist transfusion practitioner who can be contacted to offer you additional advice or information. If you would like the opportunity to discuss your transfusion further please ask a member of staff to bleep them for you. You can also obtain additionall information on the internet.

#### Patient information leaflets

hospital.blood.co.uk/ patientservices/patient- blood-management/patient- informtion-leaflets/

# Patient (and donor information)

blood.co.uk/information-forpatients/blood-transfusion/

#### Consent for blood transfusion

transfusionguidelines.org.uk/ transfusion-practice/ consent-for-blood-transfusion-1

#### **Blood donors**

If you have received a blood transfusion since 1980 you will not be permitted to donate yourself. If you have previously been a blood donor you may no longer be allowed to donate blood following surgery or other types of medical treatment you may no longer be allowed to donate blood, but please ask your family and friends to do so. It could save a life.

For information on blood donation, please go to **blood.co.uk** 

#### **Royal Papworth Hospital NHS Foundation Trust**

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