

# Receiving a Transfusion Information for patients and relatives



# RECEIVING A TRANSFUSION INFORMATION FOR PATIENTS AND RELATIVES

This leaflet has been prepared to explain the reasons why you may be advised to have a blood transfusion and the different kinds of transfusions available.

Like all medical treatments, a transfusion should only be given when it is really necessary. The decision to give a transfusion to a patient is made only after careful consideration. In making the decision your doctor will balance the risk of you having a transfusion against the risk of not having one. If you need a transfusion your doctor will explain why it is best for you, any available alternatives, and that you have an option to refuse. If this has not been explained to you then ask your named nurse.

If it has been necessary to give you a transfusion as an emergency before you could be asked, the reasons for the transfusion and written information must be provided afterwards.

All staff involved in your transfusion have had specified training in the clinical transfusion process.

## WILL I NEED A BLOOD TRANSFUSION?

Most people can cope with losing a moderate amount of blood without needing a blood transfusion. Your body will make new red blood cells over the following few weeks. However, if larger amounts of blood are lost, a blood transfusion may be the only way of replacing blood rapidly.

Red blood cells are used to support major surgery, accident victims and childbirth emergencies. They are also transfused when illnesses such as arthritis or cancer cause anaemia, for premature babies whose bone marrow is immature and to treat patients who are bleeding for other reasons.

## WHAT CAN I DO TO REDUCE MY NEED FOR TRANSFUSION?

- Are you having an operation soon? It might help to take iron in the few weeks before your surgery - ask your GP or consultant, especially if you know that you have suffered from low iron levels in the past.
- If you are on warfarin, clopidogrel or aspirin, check with your GP or consultant whether or not you should stop these before your operation. Stopping these drugs may reduce the amount of bleeding **but this decision can only be made by your doctor.**

## IS BLOOD TRANSFUSION MY ONLY OPTION?

Blood transfusion is only needed in a small number of patients. Sometimes your own blood can be recycled during an operation. Ask if this is suitable for you. Many causes of anaemia (low blood count) are treated by other ways rather than by giving a transfusion.

## IS IT SAFE TO HAVE A TRANSFUSION?

Transfusion can be life saving but, like other medical treatments, is not completely free of risk. The main risk from a red blood cell transfusion is receiving blood of the wrong blood group.

To ensure you receive the correct transfusion, the clinical staff will make careful identification checks. They will ask you your full name and date of birth. They will then check the details on your wristband to ensure that you receive the correct transfusion.

Donated blood will be specially selected to match your own blood for the most important blood groups. Patients can develop an antibody to the transfused blood and will have to have specially matched blood. If you have a card saying that you need to have specially matched blood please show it to your doctor and ask them to inform the hospital transfusion laboratory. The antibody carries no other problems for your health.

## MEASURES TAKEN BY THE TRANSFUSION SERVICES HAVE IMPROVED THE SAFETY OF BLOOD

- The risk of getting hepatitis from transfusion is about 1 in 850,000 which is much lower than the risks to health associated with common activities such as smoking or driving a car.
- The chance of HIV infection due to blood transfusion is extremely rare, at 1 in 4 million.
- Experts advise the Transfusion Service that the chance of contracting variant Creutzfeldt-Jakob Disease (vCJD) from a transfusion is very small. We are excluding donors who may be at slightly higher risk of being exposed to vCJD.
- Bacteria (Germs) may contaminate red cells and platelets. This is most likely to occur with platelet transfusions and is recorded as often as 1 in 2,000 transfusions and proves fatal once a year in the UK.

Transfusions occasionally cause allergic reactions, which most commonly result in skin rashes, fevers or feeling breathless. Clinical staff will regularly monitor you during your transfusion according to hospital policy and ask you how you feel in order that any side effects are picked up quickly.

Severe reactions to blood transfusion are extremely rare but staff are trained to recognise and deal with these. If you feel unwell at any time during your transfusion you must immediately contact the nurse looking after you.

## HOW IS A TRANSFUSION GIVEN?

- Using a sterile needle and tubing, it is dripped into a vein - usually in your arm.
- One bag of blood (a unit) takes about 2 - 3 hours to give (but can be given more quickly if needed). A platelet or plasma transfusion (a pale yellow liquid) takes around 30 minutes to an hour to give.
- Sometimes platelet or plasma transfusions may be needed daily or every other day for a period of time - your doctor will let you know.

## HOW WILL I FEEL DURING MY TRANSFUSION?

- Most people feel no different at all during their transfusion.
- Some people develop a slight fever, chills or a rash usually due to a mild immune reaction or allergy that is easily treated by, for example, giving paracetamol (Panadol) or giving the transfusion more slowly.

The nurses looking after you will check your transfusion regularly and ask you to tell them how you feel. Do tell the nurse immediately if you feel unwell.

## WHAT IF I HAVE OTHER WORRIES ABOUT TRANSFUSION?

You may be afraid of needles, worried about being squeamish at the sight of blood or have had a bad experience in the past in relation to blood transfusion.

Please tell your nurse or doctor about any concerns you may have. They will not think that these fears are silly or of no importance.

## DIFFERENT TYPES OF TRANSFUSION

When blood is donated, it is separated into components. These components are red blood cells, platelets and plasma, and each of these components can be used separately in the transfusion process depending on the medical condition to be treated.

## WHY MIGHT I NEED A RED BLOOD CELL TRANSFUSION?

- To replace blood lost in surgery or accidents.
- To treat anaemia (shortage of red blood cells).
- During treatment of cancer or leukaemia.

If you are anaemic, your body does not have enough red blood cells to carry the oxygen you require. You may feel tired or breathless and look pale. Most people can cope very well with losing a moderate amount of blood (for example, 2-3 pints from your total of around 8-10 pints).

- Fluid lost can be replaced with a salt solution.
- Over the next few weeks your body will make new red blood cells.

However, if larger amounts are lost it may be necessary to replace this by blood transfusion so that you do not become too anaemic.

- A blood transfusion is effective treatment when rapid improvement is needed.
- Medicines and vitamins may be a better option when the situation is less urgent.
- Many medical treatments or operations cannot be safely carried out without using blood.

### WHY MIGHT I NEED A PLATELET TRANSFUSION?

- To increase the number of platelets in your blood.
- To replace the platelets which are not working properly.

Platelets are small cells found in the blood which help your blood to clot. If there are not enough or they are not working properly you may bruise easily, have small red spots on your skin or bleed a lot from cuts.

The number of platelets in your blood is reduced if your bone marrow is not working properly. Most commonly this is due to cancer treatment (chemotherapy drugs). Platelets are made in the bone marrow and following chemotherapy the bone marrow stops making these cells for a short time and then starts back up again.

In some cases the body is using up platelets faster than they can be produced so platelet transfusion may be needed for a short period of time, for example after some heart operations.

### WHY MIGHT I NEED A PLASMA TRANSFUSION?

Clotting factors are proteins, which help the blood to clot. If your clotting factors are low you may bruise easily or bleed from a wound for a longer time than other people. Fresh Frozen Plasma (FFP) contains many different clotting factors and Cryoprecipitate contains more of one clotting factor called fibrinogen.

A transfusion of these plasma products increases the level of clotting factors in your blood.

- The blood thinning drug warfarin is one of the most common causes of low clotting factors. Correcting this is usually with medicines containing the precise clotting factors rather than FFP.
- People can also develop low clotting factors (often more than one) when there has been liver damage or infection or after a large blood transfusion.
- Some individuals are born with a deficiency of one clotting factor. This can often be treated with a specific clotting factor, but some need FFP or Cryoprecipitate.

FFP is made from UK donor plasma except for children up to the age of 16 years. Plasma for these children is from the USA and is treated further as an additional safety measure.

### WHAT HAPPENS TO ME AFTER I HAVE BEEN TRANSFUSED?

For most people a single transfusion is all you may need. However, depending on your treatment you may need repeated transfusions of blood or its products.

Please note that if you have received a transfusion you will no longer be able to donate blood. Those who receive many transfusions (over 80) may be advised if it is necessary to take any other health measures. These are precautions against vCJD transmission.

We are required by law to keep a record of the transfusions you receive for 30 years.

### DATA PROTECTION ACT

If you experience any unexpected event due to your transfusion, the details may be passed to a national adverse event reporting system. In this case your personal details will not be given out. If you have any concerns about this, please discuss this matter with your doctor.

In order to plan for future blood demands, the SNBTS (who provides the blood for patients) may ask a hospital or doctor to provide limited information on the patients who have received transfusions.

## OTHER INFORMATION

If you are interested in finding out more about transfusion, and have access to the internet, you might find the following web sites useful:

Scottish National Blood Transfusion Service

<http://www.scotblood.co.uk>

National Blood Service (England)

<http://www.blood.co.uk>

NHS QIS Clinical Standards

<http://www.nhshealthquality.org>

British Blood Transfusion Society

<http://www.bbts.org.uk>

Handbook of Transfusion Medicine

<http://www.transfusionguidelines.org.uk>

Serious Hazards of Transfusion

<http://www.shotuk.org>

National Patient Safety Agency

<http://www.npsa.nhs.uk>

## Notes

You might want to make a note here of any questions you want to ask the nurse or doctor about your transfusion.

## Contact Details:

Scottish National Blood Transfusion Service  
0131 536 5700

This publication can also be made available  
in large print, braille (English only),  
audio tape and in different languages.

If you would like further information contact  
The Public Affairs Department  
Tel. 0141 357 7752



Complete the label below, peel off and place securely in the patient's notes or transfusion care pathway in the appropriate section.

Hand the leaflet to the patient.

**NHSScotland; Blood Transfusion**

I have discussed the need for transfusion with:

Patient Name .....

According to guideline blood transfusion is indicated  Y  N

This leaflet has been given to the patient  Y  N

Possible alternatives to transfusion have been discussed  Y  N

Does the patient agree to transfusion  Y  N

Signature .....

Print Name .....

Designation .....

This label should be signed by a member of the clinical team informing the patient of transfusion.

**Remember; Risks, Benefits, Alternatives**

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