

Blood transfusion

Introduction

You or your child will shortly have treatment that may involve a blood transfusion. This leaflet gives you more information.

When is a transfusion necessary?

Reasons for blood transfusion

Each year around 250,000 people in the Netherlands receive a blood transfusion. The aim of a blood transfusion is mainly to resolve anaemia quickly. Anaemia may be caused by blood loss during an operation or after an accident, but also if the body is not producing enough blood.

Prescribing transfusion

In principle your attending physician will only prescribe a blood transfusion after your permission, unless there is an emergency. In order for you to give your permission, the doctor must inform you about the following:

- the reason of the blood transfusion;
- the risks involved in the blood transfusion;
- the risks if you do not agree with the blood transfusion;
- any alternatives to a blood transfusion;
- whether a transfusion with your own blood is possible (autotransfusion).

Safety / risks

Donor blood in the Netherlands is very safe and the Dutch Blood Transfusion Service (Sanquin) do their utmost to safeguard this quality. Only blood from healthy donors is used and blood is

rigorously tested on viruses and bacteria that can be passed on via blood, such as hepatitis B and C (liver infection) and HIV. Despite all precautions there is never a 100 % guarantee that no infections can be passed on from donor blood. But the risk of this happening is extremely small, for example, for an infection of the HIV-virus it is less than one in five million.

Refusal

You may refuse a blood transfusion. Do bear in mind that there are generally few other possibilities. Some operations or treatments cannot be performed without blood transfusion. Refusing a blood transfusion may mean a greater risk for your health than receiving donor blood. Discuss your concerns about the blood transfusion in good time with the doctor who is treating you.

The transfusion

Preparation

It is important that a person receives blood that is 'suitable' for him/her. For this reason the lab technician takes a sample of blood from you (or your child) to determine the blood group and the so called Rhesus factor. If this is the first time the blood group is determined, a blood sample will be taken twice in succession for safety reasons.

Suitable blood

Occasionally a person needing a blood transfusion is found to have antibodies that react to components of the donor blood. These so called 'irregular

antibodies' may not be harmful to you but could give unpleasant reactions during the blood transfusion. Finding 'suitable blood' may then take a bit longer.

Your details and the 'irregular antibodies' found in you are automatically registered in a national database accessible to all hospitals in the Netherlands. If you object to having your details entered into the database please inform your attending physician or the laboratory, telephone number (020) 755 7228. You will receive a blood group card which you must always show at any future transfusions.

Procedure for adults

Blood is administered via an intravenous drip, usually in a vein in your arm. Shortly before you receive the blood transfusion, the laboratory and the nurse check again whether the donor blood is definitely intended for you.

Procedure for children

At the agreed time you report to the Paediatric ward. A laboratory staff member will come to take a sample of blood from your child. If your child is younger than three months, a sample is also taken from the mother for cross-matching. Cross-matching is necessary to check whether the donor blood is suitable. If the mother needs to give a sample, she will go to the laboratory. She will receive an application form from the nursing staff. If the donor blood bags (filtered erythrocytes) are ready, the paediatrician will apply the intravenous drip to your child. After the blood has been administered, the drip stays in place until the following morning when a glucose solution will be administered.

The following morning a sample of blood is taken from your child to check the Haemoglobin(Hb) level. If the results are good, the drip may be removed and your child may go home. If the result is not

yet satisfactory the doctor determines whether more blood must be given.

Side effects

It does not happen often, but during the transfusion a transfusion reaction or allergic reaction may occur. Such a reaction manifests itself in the form of fever, shivers, hives, itching or red skin. This can be treated by medication. To diagnose such a reaction, the nurse checks the body temperature and blood pressure before, during and after the blood transfusion.

Autotransfusion *(not for children)*

In exceptional cases blood from your own body is sometimes used. A transfusion with your own blood is called 'autotransfusion'. This blood must be taken from you a month before the operation. The procedure is time consuming, costly and only suitable for otherwise very healthy patients. You will have to undergo a medical test in advance. Your blood vessels must also be suitable for repeatedly taking blood from you and a test needs to be carried out to see if there are any blood-transmitted conditions which should not be present. Obviously this procedure is only suitable for operations that can be planned well in advance and do not involve great blood loss.

Finally

Want to be a blood donor?

If you need blood, it is there. That goes without saying. You can help to keep it that way. Talk about this with the people around you. Everyone aged between 18 and 70 who is healthy can be a blood donor. More information is available from the blood bank in your area.

Questions

If you have any questions or comments after reading this leaflet, please do not hesitate to ask the nurse, attending physician or clinical chemist.