

Blood Transfusions

A blood transfusion is a procedure that gives a patient blood through a peripheral (hand/arm) IV or a central line catheter. Blood is mostly given because of low blood levels or active bleeding. This can be caused by:

- Injury
- Surgery
- Chemotherapy
- Drugs
- Certain diseases/illness

Blood can be given “whole,” but most often, only certain parts of blood are given based on patient needs. The most common blood parts are red cells, platelets, plasma, and cryoprecipitate.

- **Red Blood Cells** carry oxygen from the lungs to the tissues of the body. Without enough red blood cells, patients may become anemic and may feel tired and look pale.
- **Platelets** help to clot blood and stop bleeding.
- **Plasma** also plays a large role in blood clotting. This may be given if a patient is bleeding, has low levels of clotting factors or a high INR.
- **Cryoprecipitate** is given to control bleeding. This is given to patients who have low blood levels of one or more clotting factors.

During the Transfusion

Before the transfusion, your nurse will make sure you have a recent type and screen lab test. This tells us your blood type. If you do not have a recent lab test on file, your nurse will draw blood and send it to the lab.

Tell your doctor if you have had a transfusion reaction before.

Once the blood arrives, nurses will double check the blood product at the bedside. This makes sure you are getting the right product.

Your vital signs (blood pressure, pulse, temperature, and respiratory status) will be checked often. Your nurse will stay in the room with you for at least the first 15 minutes. This is the most likely time for a reaction to occur.

During your transfusion, tell your nurse right away if you have:

- Bleeding, pain, or new bruising at the IV site
- Severe back pain
- Fever and/or chills
- Nausea/vomiting
- Rash/hives/itching
- Headache/dizziness
- Chest pain
- Fast heartbeat
- Trouble breathing/wheezing
- Dark or reddish urine
- Yellowing of the skin or eye

After the Transfusion

Lab levels will be rechecked 1 hour after the transfusion or as the doctor orders. If you have any of the symptoms listed after the transfusion is done, tell your nurse or doctor right away. This may still be a sign of a transfusion reaction.

Risks

Along with our blood supplier, we aim to make our blood products as safe as possible. Blood that is given to patients has been carefully prepared and tested. Most blood products are given without any problems, but it is important to know that problems can happen.

Minor Reactions

During or right after a patient starts to get a blood product, they might notice a rash, hives, itching, fever, or chills. These symptoms are seldom serious. Nurses and doctors watch for these signs.

If a severe symptom such as trouble breathing occurs, the doctor and nurse will respond quickly.

Serious Problems

Getting a disease from a blood product is rare, but it can happen. The more severe diseases carried through blood are:

- **HIV:** The chance of getting HIV is 1 in 2 million units transfused. This is a disease caused by the Human Immunodeficiency Virus (HIV).

The virus travels through blood and destroys the body's disease fighting system. It can cause illness and death. Since early in 1985, all blood donors have been tested to see if they carry or are infected with HIV.

Because of careful screening and testing, the risk of getting AIDS from blood transfusions is quite low.

- **Hepatitis B and C** affect the liver. The chance of getting hepatitis after a transfusion is very low. The risk is about 1 per 500,000 units transfused for Hepatitis B and 1 per 2,000,000 units transfused for Hepatitis C. If Hepatitis B does occur, it tends to be mild, and patients recover. However, Hepatitis B & C can become chronic.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 6/2022 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6346