

# **BLOOD TRANSFUSION**

## **Your Options**



This booklet provides basic information about the benefits and risks of various types of blood transfusions. After reading this material, you and your doctor should discuss which form of transfusion is best for you.

### **What Are the Sources of Blood?**

When a transfusion is needed, you MAY receive either blood you have donated for yourself or blood donated by a volunteer from the community. Blood is donated voluntarily by healthy people who want to help others. Careful screening is done to protect the health of both the person donating the blood and you, the patient, who will receive it. Before

donating, each volunteer donor is asked questions to identify people at risk of transmitting infectious diseases. Blood is collected by a sterile method into a disposable bag. Nothing that comes in contact with the donor is used more than once. Following collection, the blood is sent to the laboratory and subjected to various tests (explained in a later section of this booklet).

### **What Tests are Done on Blood?**

The blood supply in the United States is extremely safe. All blood donors are screened with an extensive health history and those donors that are at risk of transmitting an infectious disease are denied donation. All of the donor blood transfused at the University of Michigan Hospitals and Health Centers is tested with the most advanced methods and must show no signs of syphilis, hepatitis or exposure to AIDS viruses. It is also tested to determine the blood type. Before transfusion, special tests are

performed to make sure the blood is matched with you. The procedures we use meet or exceed the requirements of the U.S. Food and Drug Administration.

The same thorough screening and testing procedures are used for directed donations (this type of donation is one in which the patient chooses people to donate blood for him/her) as for blood collected from the community. Similarly, the risks with blood from designated donors are the same as the risks with blood from community volunteers.

### **Donating Blood**

Family and friends who wish to assist in maintaining the blood supply for patients in the area can donate at their local community blood bank or Red Cross blood center. No special arrangements are necessary. There are no charges to the patient for a donation to the blood supply.

### **Being Your Own Blood Donor**

Donating your own blood before your surgery is called **autologous** donation. Although we rarely turn down someone who wishes to donate their own blood, some transfusion doctors advise against it. Questions to consider include your medical condition, the number of units that would be required, and the amount of time before your surgery.

- Autologous blood does not eliminate all possible risks of transfusion. Autologous blood is not necessarily safer than blood from the community blood supply.
- Some medical conditions may make autologous donation unsafe.
- Autologous donation may cause anemia and increase the likelihood of needing a transfusion with autologous blood or blood from the community blood supply.
- Autologous blood must be donated at least four days before your surgery, although a

much longer interval is preferred.

- More than one unit can be donated through a schedule arranged by the Red Cross. Your physician can help you decide if your surgery is one in which autologous donation offers a benefit.
- When you donate blood for your surgery it is processed and stored separately from the community blood supply.
- Unfortunately, the cost of autologous blood donation is not covered by all medical insurance carriers for all procedures.
- In addition, autologous donation may not provide all of your transfusion needs. Blood products that assist in clotting, such as platelets and plasma, cannot be stored as autologous donations except in rare circumstances. If you need such products, they will come from community volunteers.

### *Side Effects of Being Your Own*

#### *Donor*

As with any blood donation, you may experience temporary tiredness or weakness following donation. Your blood iron level will decrease after donation. Therefore, depending on the number of units you will donate, your doctor will usually prescribe iron supplements.

### **Intraoperative Autologous**

#### **Transfusion**

Another way to use your own blood is through a procedure known as intraoperative autologous transfusion (IAT). With IAT, blood which is shed during your surgical procedure is prepared and given back to you. If this procedure interests you, discuss your options with your doctor before your operation.

### **Choosing Family or Friends to**

#### **Donate Blood**

Selecting your own donors to provide blood for you is called **directed, or designated, donation**. Directed donations are not necessarily safer than the community blood supply. However, for some patients directed donation provides some peace of mind because they personally know the people who have donated the blood.

- A directed donation may still transmit disease because friends and family may feel pressured to donate and may not provide complete answers to questions during their health history that would indicate their blood is unsafe.
- Directed donations must be matched with your blood type.
- Even if someone donates for you, the blood may not be available for you because of compatibility, donor qualifications or processing problems.
- There are medical reasons why some donors, especially close

family members, may not be suitable for you. The medical staff of the blood bank can advise you on these reasons.

- Directed donations must be collected at a Red Cross facility or a community blood **bank at least ten working days** before the anticipated transfusion to allow for testing and shipping.
- Most insurance carriers do not cover the donation fee.

### *Possible Risks of*

#### *Community//Directed Donor Blood*

Any blood transfusion may result in a variety of minor side effects, including chills, fever or hives. Very rarely, serious reactions can occur, including shortness of breath, shock, kidney failure and even death. In addition, there is a slight risk of acquiring an infectious disease, such as hepatitis, or even more remotely, AIDS. Improved donor screening and blood testing procedures have made the nation's blood supply safer than it has ever been.

## ***Possible Risks of Receiving***

### ***Autologous Blood***

Some of the risks associated with blood transfusion are less with your own blood such as the risk of hepatitis or AIDS. However, chills, fever, shortness of breath and bacterial contamination of the blood unit resulting in infection and even death can also occur even with your own blood.

### **Arranging for Donations**

Blood donations can be made at the Southeastern Michigan Red Cross Blood Centers, at Red Cross Blood Centers as well as at Michigan Community Blood Centers and other hospitals. The University of Michigan Hospitals and Health Centers will accept autologous and directed donor blood from Red Cross and community blood centers across the nation that are licensed to ship blood interstate. The Transfusion and Apheresis Services staff will assist you in identifying a convenient facility. The

Blood Bank at the University of Michigan Hospitals and Health Centers must be notified of your request so that shipping arrangements can be made and to assure that the blood is reserved for the correct patient. To do this, the patient **MUST** have a University of Michigan registration number (CPI number) and the units must be labeled with this number.

### **A Final Consideration- Costs**

The cost of these options varies and some or all of these costs may be passed on to you. **Per unit surcharges assessed by the collecting facility for autologous and directed donor blood are not covered by all health insurance policies.**

Now that you know your options, you may wish to discuss them with your doctor. He or she can help you decide which option is best for you.

### **Contact Information**

Mailing Address:

Blood Bank & Transfusion Service  
University of Michigan Hospitals and  
Health Centers  
UH 2F225/ 1500 E Medical Center  
Drive  
Ann Arbor, Michigan 48109-0054  
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