Apheresis

Apheresis uses a machine to spin the blood and separate it into parts. A drug is added to keep the blood from clotting. The blood parts that are leading to illness are then taken out of the blood. The healthy parts of the blood are returned to your body. At times, healthy, donor blood parts are also used.

Types of Apheresis

Plasmapheresis (Plasma Exchange)
Blood is drawn from your arm and passed through a small tube (catheter). The blood flows from the tube into a bag. The bag is put in a machine that spins the blood (centrifuge). As the blood spins, it splits into plasma and platelets. The plasma is light and rises to the top. The plasma layer is removed. The rest of the blood along with a plasma replacement is returned to your body through a small tube to your other arm or catheter. Only about one cup of blood is removed from your body at one time.

The plasma that is removed is replaced by:

- **Albumin-** a human blood product that has been screened and heat-treated. This is to prevent disease from being transferred. Side effects are rare, but may include nausea, fever, chills, itching, low blood pressure, or flushing.
- **Saline**-a salt-water mixture.
- **Fresh frozen plasma**-healthy plasma given by blood donors that has been checked for viruses. Side effects may include itching, hives, chills, fever, and skin flushing. Rare side effects are labored breathing, low blood pressure, and allergic reaction. Tell staff if you notice any of these side effects.

Leukapheresis or Plateletpheresis
This process removes white cells and platelets. The red cells and plasma are returned.

Red Blood Cell Exchange
A red blood cell exchange removes red cells from the blood stream and trades them with donor red blood cells.

Photopheresis
This process selects white blood cells and exposes them to ultraviolet light. The cells are returned to the body. After the white cells are gathered, they are injected with the drug 8-methoxy psoralen. This makes the cells more sensitive to UV light. The treated white cells are then returned to your body. They will react against the diseased white cells in your body.

Patients who have this will **need to wear sunglasses** for 24 hours after each treatment. The drug used will make the lens of the eye sensitive to sunlight. **Avoid** sunlight as much as you can for 24 hours.

Before Treatment

The apheresis doctor will explain the treatment and get your consent before starting.

The type of central line or IV used for your treatment depends on the type of treatment, the number of treatments needed and the quality of your arm veins. If possible, we will place two IVs in your arms for each treatment.

Sometimes, we do not get a good blood flow from arm veins. Then, a central line needs to be placed into a large vein in your neck or chest. This is done by a doctor. Your central

line/IVs will be attached to the apheresis machine.

During Treatment
The treatment is done in your hospital room or in the Infusion Center, C5/350. A nurse will perform the treatment. It will take about two hours. If there is space, family members can be with you. The nurses will be with you always. Vital signs will be checked often.

Most people say that lying still is the hardest part of the treatment. You will not able to leave your bed. You should go to the bathroom before the treatment starts. If you need to go to the bathroom during treatment, you will need to use a urinal or bedpan.

You may read a book or watch TV. We have DVD players and a DVD library. Free WIFI is also available.

Your nurse can provide you with a drink if you would like. You may also bring in something from home to eat or drink.

Side Effects
Side effects of all the treatments can include dizziness, faintness and nausea. This is caused by your blood moving into the machine before the healthy parts are returned to you. Some people have tingling toes, fingers, and lips. This is caused by the anti-clotting drug that is added. Let your nurses know if you are having any of these side effects. They can be managed. You can help by eating a good meal before your treatment.

If you are receiving **photopheresis**, there is a possible risk of clotting. This is a rare but possible serious side effect.

If you are receiving **red cell exchange**, there is a possible risk of bleeding due to platelet loss.

If blood products are used (red blood cells or plasma), each one has a small risk of transfusion reactions (rarely, severe reactions, and extremely rare fatal reactions). There is a risk of a transfusion-transmitted infection.

After the Treatment
Your central line will be flushed, or both IVs will be removed. Pressure dressings to the IV sites will be put on and need to stay on for a few hours. After your first treatment, we advise you **not** to do any hard physical activity that day. After the day of your first treatment, you can resume your normal routine as you are able. Check your IV sites to make sure they have sealed. Ask your doctor if you are unsure.

When to Call
Call if you have any of the symptoms listed below. **After hours, go to the nearest emergency room.**

- Fever over 101.5° F
- Pain at the IV site
- Increased redness, pain, or warmth
- Bleeding at the IV site or central line site (if this happens, apply pressure to the site or try to clamp the central line above the site of the bleeding)

Who to Call
Infusion Center
Monday- Friday, 8 am-8 pm
(608) 263-8369