Apheresis Center at The Johns Hopkins Hospital

If you have any other questions about the apheresis procedure, side effects, or expected outcomes, please call 410-955-1717 and an Apheresis nurse will be able to help you with your needs or concerns.

If you have any questions concerning scheduling your appointments or billing issues, please call 410-955-6347 and one of the HATS Patient Service Coordinators would be happy to assist you.

This educational pamphlet was prepared by Christopher Willis, RN, and the nursing staff of the HATS Department at The Johns Hopkins Hospital.
A PATIENT’S GUIDE TO APHERESIS

WHAT IS APHERESIS?

Hemapheresis, (also called Apheresis), is a procedure used in the treatment of a variety of illnesses by which blood is removed from the body and separated into its 4 components: plasma, platelets, white blood cells, and red blood cells. The targeted blood component is then removed and the remaining blood cells, with or without a replacement fluid, are returned to the patient. This removal and replacing of the blood is done simultaneously to maintain proper fluid balance.

There are different types of Apheresis: Plasmapheresis is the removal of the plasma; platelet-pheresis is removal of platelets; leukapheresis is the removal of white blood cells; and erythrocytapheresis (red blood cell exchange) is the removal of red blood cells.

WHY DO I NEED APHERESIS?

Therapeutic Apheresis is done for various reasons. It is performed for people for which a component of their blood is either abnormal in content or quantity as a result of many possible illnesses, such as transplant rejection, auto-immune disorders, sickle cell anemia, or certain types of cancer. Apheresis can isolate and remove that abnormal portion of the blood and thereby help resolve the symptoms.

WHAT HAPPENS DURING THE PROCEDURE?

First, I.V. access needs to be obtained. This is done either by placing an I.V. in each arm, or by using a double lumen catheter. Your doctor will determine the best method of access. Once access has been established, the pheresis nurse will check your vital signs and proceed to connect you to the apheresis machine called a cell separator. Blood will be drawn from one line and separated into its components. The abnormal portion is removed and collected in a bag that is hanging on the machine. The replacement fluid is simultaneously added to the remaining blood components and reinfused. The removal and replacing of blood is done at the same time, so there isn’t any blood loss and proper fluid balance is maintained. The nurse monitors heart rate throughout the procedure to ensure that you are not suffering any side effects. The procedure can last from 1-2hrs, during which, it is ok to take a nap, read, listen to music, watch a movie, or just chat with your nurse.

SIDE EFFECTS?

The most common side effect is feeling cold. Heating pads, blood warmers, and blankets are used to keep you warm and comfortable. Another side effect may include a tingling or “pins and needles” sensation in the lips, fingertips or feet. Other side effects include: dizziness, light-headedness, low blood pressure, nausea, vomiting, bleeding. If you experience any of the above-mentioned effects, or anything else unusual, tell the nurse immediately.

FYI (KEY POINTS TO REMEMBER)

1. It is helpful, but not necessary, to eat prior to your procedure. Foods rich in calcium are best (yogurt, cheese, milk).
2. A nurse will be present with you throughout the entire procedure.
3. If you experience any of the above side effects (cold feeling, tingling, dizziness, light-headedness, low blood pressure, nausea, vomiting, or bleeding) tell the nurse right away.
4. You may feel tired or fatigued after the procedure. If you are an outpatient, you should bring someone with you.
5. Wear loose fitting, comfortable clothing.
6. Make sure your doctor is aware of ALL medications you are taking.