Plasma Exchange or Apheresis

What is plasma?

Plasma is the liquid part of the blood. Plasma carries the parts of the blood to all cells in your body. Some of these things plasma moves around are:

- red and white blood cells and platelets
- vitamins and minerals
- chemicals and hormones

Plasma looks yellow when it separated from all the other parts of the blood.

What is plasma exchange?

During plasma exchange, plasma is taken out of your body and replaced by a special fluid prescribed by the doctor. Plasma exchange is also called apheresis.

While your blood flows through a machine, the plasma is replaced and the red cells, white cells and platelets are put back into your body in the new fluid.

Plasma can be replaced with:

- donated frozen plasma
- replacement fluid made in a laboratory

Why do I need plasma exchange?

Sometimes, plasma carries substances that are harmful to your body. Some diseases produce auto-antibodies. Auto-antibodies attack healthy cells and cause many problems.

Some diseases make your body produce too much protein. Protein is very thick and slows down blood flow causing problems.

Plasma exchange is done when there is no way to take the substance causing problems out of the blood. Plasma can be removed and replaced.

When you come to come to the hospital

Please do not wear perfume or scented products.
What happens during a plasma exchange?

A health care provider will help you settle into a chair or bed. A needle is put into a vein in your arm. The needle is attached to plastic tubing that goes into a machine called a Blood Cell Separator. Before the plasma exchange begins, your nurse will give you medication that runs through the tubing to prevent your blood from clotting.

Blood then flows from your body, through the tubing, into the machine. Inside the machine, your blood cells are separated from your plasma. Your blood cells are then mixed with the replacement fluid that your doctor has prescribed for you. The new mix of cells and fluid then flows back through more tubing into your other arm.

Plasma exchange is a sterile procedure. It takes between 2 and 4 hours for one exchange.

How will I feel during a plasma exchange?

You may feel dizzy during an exchange. If you feel dizzy, tell your nurse. You can eat and drink during the procedure. It also helps to have something to drink and go to the bathroom before you start the exchange.

The medication used to prevent blood clots may give you a sour taste in your mouth, tingling around your mouth and lips or feelings of pins and needles in your fingers or toes. If you have any of these feelings or other feelings, tell your nurse right away.

You may have pain or discomfort when the needles are being put in. Some people find it hard to sit still for 2 to 4 hours with needles in their arms. You can have someone sit with you once the exchange has started. You can bring some music and earphones to help you relax if you want.

Your nurse will be close by during your plasma exchange. Tell your nurse right away if you are having any effects before, during and after the exchange.

You may feel very tired after the exchange and need to rest.

Who do I contact if I have questions or concerns?

For questions and concerns, contact the Apheresis Unit at 905-522-1155 extension 33160. If there is no answer leave a message and a nurse will call you back.

• Centre for Ambulatory Health Services
• St. Joseph’s Hospital
• Centre for Mountain Health Services

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