Transplant Desensitization with Plasma Exchange and IVIG

This handout explains what to expect during transplant desensitization treatment.

Desensitization
Desensitization removes antibodies from the blood. Antibodies are proteins that white blood cells make to help the body fight infection. The body makes antibodies as the first line of defense in the immune process.

These antibodies work hard to protect our bodies and keep us healthy. But these same antibodies could be bad for someone with a kidney transplant. They can attack or destroy a transplant kidney.

Antibodies are created during a past transplant, blood transfusion, or pregnancy.

Plasmapheresis (Plasma Exchange)
Plasmapheresis (plasma exchange) is used to remove antibodies. This treatment is like hemodialysis, but it does not replace your regular dialysis treatments.

You may need **2-6** plasma exchange treatments before your transplant. You will also have treatments after your transplant to remove more antibodies. Plasma exchange removes plasma, the liquid part of your blood, and replaces it with new fluids.

Plasma contains proteins, including antibodies. Some antibodies can attack healthy cells or a transplanted kidney. Plasma exchange removes some of these antibodies. This treatment may help make a kidney transplant possible.

How Plasma Exchange Is Done
A nurse places needles in your arm or uses a catheter. Some people need a catheter placed in a large vein in the neck or leg.

Your blood flows through tubing into a machine. The machine separates the plasma from the blood cells.

The plasma is removed, and replacement fluids are added. The blood cells and replacement fluids are then returned to your body.

Only a small amount of blood, about 1 cup, is outside your body at one time.

Plasma Replacements
The plasma that is removed is replaced with one or more of these fluids. Tell your care team right away if you have any side effects during treatment.

Saline: A saltwater solution

Albumin: A blood product that has been screened and treated to reduce the risk of disease transmission. Side effects are rare but may include:

- Nausea
- Fever
- Chills
- Itching
- Low blood pressure
- Flushing

Fresh frozen plasma: Plasma from screened blood donors. Side effects may include:

- Itching
- Hives
- Chills
- Fever
- Flushing
- Trouble breathing
- Low blood pressure
- An allergic reaction

Immune Globulin (IVIG)
You may receive a medicine called Immune globulin (IVIG) after the exchange. IVIG is given through an IV in your arm or a catheter in your neck. This medicine helps prevent the return of the antibodies or a rebound. The entire treatment takes 5 – 6 hours.

Side Effects
Most people feel well during and after plasma exchange. Some side effects may happen during treatment or shortly after.

Some have felt dizzy or light-headed. Slowing the rate of the exchange or lowering your head can help relieve these symptoms. Laying down and raising your feet higher than your head can also help.

Some people have numbness in the lips and tingling in the hands and fingers. Chewing Tums® or drinking milk can help.

Others are slightly sick to their stomach (nauseated). These symptoms often go away after the exchange is done. It will help if you eat something before the treatment.

Activity Restrictions
Most people feel tired. Plan on little or no activity for the next few hours. Do not do any heavy lifting or exercise.

For the next few hours, leave your bandages on and keep them dry.

When to Call
Call the UW Health Infusion Center if you have any redness or pain where the needle was placed

Who to Call
If you have questions, please contact your provider through MyChart or call your provider listed in your After Visit Summary or After Hospital Care Plan. For a list of UW Health Clinics, visit www.uwhealth.org/.

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 © 8/2026. University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#5790.