



PATIENT & CAREGIVER EDUCATION

Frequently Asked Questions About Photopheresis

This information explains photopheresis, including how to get ready for the procedure and what to expect after it.

What is photopheresis?

Photopheresis (FOH-toh-feh-REE-sis), or extracorporeal photoimmune therapy, is a procedure that treats graft versus host disease (GVHD, a disease caused when donated stem cell graft attacks normal tissue) or cutaneous T-cell lymphoma (CTCL).

During photopheresis, some of your blood is taken from your vein. Your white blood cells are then separated from the other cells in your blood. Your white blood cells are treated with a medication called methoxsalen, exposed to ultraviolet (UV) light, and then put back in your vein, along with your other blood cells. These treated cells help your immune system fight GVHD and CTCL.

How do I get ready for photopheresis?

A few days before your procedure, your healthcare provider will examine your veins to see if they can be used for the procedure. If they can't, you'll have a central venous catheter (CVC) placed in a large vein below your collarbone. Your blood will be taken from the CVC for the photopheresis procedure. If you need to have a CVC placed, your healthcare provider will give you more information about it.

2 days before your procedure

- Try to drink 8 (8-ounce) glasses of liquids every day. Being well hydrated helps your blood to flow better during your procedure.

The night before your procedure

- Eat a low-fat meal. You should avoid foods such as fried foods, cheese, eggs, butter, and desserts. If you have high levels of fat in your blood, the machine may have trouble separating your blood cells and your procedure may need to be stopped before it's finished.
 - For examples of low-fat meals, read our resource *Minimal-Fat Diet* (https://sandbox18.mskcc.org/pe/minimal_fat_diet).

The day of your procedure

- Eat low-fat meals and don't skip any meals.
- You won't be able to use the bathroom during photopheresis, so don't drink too much for a few hours before your procedure. If you need to use the bathroom during the procedure, you may use a bedpan or urinal.
- Bring a list of any medications you're taking, including patches and creams.
- Wear comfortable clothing with loose sleeves.

What happens during photopheresis?

Your nurse will place a needle into your arm or will connect your CVC to the photopheresis machine. The photopheresis machine will draw your blood and separate the white blood cells from the rest of the parts of your blood. The remaining cells in your blood will be placed back into your vein through your arm or CVC.

Your white blood cells will be treated with a medication called methoxsalen and then exposed to UV light, which activates the medication. The treated white blood cells will then be re-infused into your body through your arm or

CVC. The treated cells will help your immune system fight GVHD or CTCL.

Another medication called heparin is used during the procedure to prevent your blood from clotting in the photopheresis machine.

How long does photopheresis take?

The procedure usually takes about 2 to 3 hours. After your procedure is finished, your healthcare provider will check your pulse and blood pressure. You'll then be able to go home.

How do I care for myself after photopheresis?

After photopheresis, follow these guidelines.

- Leave the bandage on the needle site for 3 hours after your procedure.
- Avoid heavy lifting for the rest of the day.
- If you have bruising, place a cold compress to the needle site for the first 24 hours. If you have discomfort, place a warm compress on the site. If the site continues to hurt after several days or seems to be getting worse, call the Blood Donor Room staff at 212-639-6178.

What are the side effects of photopheresis?

- You may experience a fever of 100.4° F (38° C) or higher within 6 to 8 hours after your procedure. Your skin may turn slightly red. Both side effects should go away within 1 day.
- You may have some tenderness or bruising at the needle site. This is normal.
- Some people experience a drop in blood pressure that can cause lightheadedness or dizziness after the procedure. If this happens:
 - Sit or lie down right away

- Raise your feet.
- Drink cool liquids when you feel better.
- Methoxsalen will make you very sensitive to UV light the day of your procedure. UV light is found in sunlight and some artificial lighting. You must protect your eyes with sunglasses. Wear them when you're in sunlight for the first 24 hours after your procedure.
 - Your skin will also be sensitive to UV light, so you'll need to avoid sunlight on the day of your procedure. If you need to be outside, protect yourself with long-sleeve clothing and a wide-brimmed hat. You should also wear sunscreen with an SPF of 30 or higher.
- Heparin slows your body's ability to stop bleeding. This should go away within 2 to 4 hours. If you continue to bleed at the needle site, apply pressure to the site for 3 to 5 minutes until the bleeding stops. If the bleeding doesn't stop or if you see signs of unusual bleeding, call the Blood Donor Room at 212-639-6178.

When to Call Your Healthcare Provider

Call your healthcare provider if you have:

- A fever of 100.4 °F (38 °C) or higher
- Skin redness that doesn't go away after 1 day or gets worse

Contact Information

If you have any questions or concerns, call the Blood Donor Room at 212-639-6178 or the Koch Apheresis Unit at 646-608-3142. They can be reached Monday through Friday from 8:00 am to 6:00 p.m. After 6:00 pm and on the weekends, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.

Frequently Asked Questions About Photopheresis - Last updated on January 29, 2021
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