Memorial Sloan Kettering Cancer Center

PATIENT & CAREGIVER EDUCATION

Common 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) is a procedure that treats graft versus host disease (GVHD) and cutaneous T-cell lymphoma. GVHD happens when donated stem cells or bone marrow (the graft) attack healthy tissue (the host). Photopheresis is also called extracorporeal photoimmune therapy.

During photopheresis, your healthcare provider will take some blood 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 medicine called methoxsalen. Then, they are exposed to ultraviolet (UV) light and put back in your vein, along with your other blood cells. These treated cells help your immune system fight GVHD and CTCL.

Treatment for GVHD usually starts with 2 procedures a week. Treatment for CTCL usually starts with 2 procedures a month. How long you get this treatment for depends on how you're responding to it. Talk with your healthcare provider for more information.

How do I get ready for photopheresis?

A few days before your procedure, your healthcare provider will check your veins to see if they will be able to take blood from them. If they can't, you'll have an implanted port, such as a Mediport®, or central venous catheter (CVC) placed in a large vein below your collarbone. Your healthcare provider will take

your blood from the Mediport or CVC for the photopheresis procedure.

If you need to have a Mediport or 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 hydrated helps your blood flow better during your procedure.

The night before your procedure

- Eat a low-fat meal. For examples of low-fat meals, read *Minimal-Fat Diet* (www.mskcc.org/pe/minimal-fat-diet).
- Do not eat fried foods, cheese, eggs, butter, or desserts. If you have high levels of fat in your blood, the photopheresis machine may have trouble separating your blood cells. If this happens, your procedure may need to be stopped.

The day of your procedure

- Eat low-fat meals. Do not skip any meals.
- You won't be able to use the bathroom during your procedure. Do not 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 medicine 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 Mediport or CVC to the photopheresis machine. The photopheresis machine will take some of your blood. Then, it will separate the white blood cells from the rest of the parts of your blood. The leftover cells in your blood will be placed back into your vein through your arm, Mediport, or CVC.

Your white blood cells will be treated with a medicine called methoxsalen. Then, they will be exposed to UV light, which activates the medicine. The treated white blood cells will be re-infused into your body through your arm, Mediport, or CVC. The treated cells will help your immune system fight GVHD or CTCL.

You will get medicine to prevent your blood from clotting in the photopheresis machine. This medicine will be either heparin or ACD-A (Anticoagulant Citrate Dextrose Solution A).

How long does photopheresis take?

The procedure usually takes about 2 to 3 hours. After your procedure, your healthcare provider will check your pulse and blood pressure. Then, you'll 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 still hurts after several days or seems to be getting worse, call your healthcare provider. After 6 p.m. and on the weekends, call 212-639-2000.

What are the side effects of photopheresis?

- **Fever and redness.** You may have 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.
- **Tenderness or bruising.** You may have some tenderness or bruising at the needle site. This is common.

- **Drop in blood pressure.** 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.
- **Sun sensitivity.** Methoxsalen will make you very sensitive to UV light the day of your procedure. UV light is found in sunlight and some artificial lighting.
  - Protect your eyes with sunglasses. Wear them when you're in sunlight for the first 24 hours after your procedure.
  - Protect your skin by avoiding 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.
- **Some bleeding at the needle site.** Heparin slows your body's ability to stop bleeding. This should go away within 2 to 4 hours.
  - If you still have bleeding at the needle site, put pressure on it for 3 to 5 minutes until the bleeding stops.
  - If the bleeding does not stop or if you see signs of unusual bleeding, call your healthcare provider. After 6 p.m. and on the weekends, call 212-639-2000.

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 does not 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 a.m. to 6 p.m. After 6 p.m. and on the weekends, call 212-639-2000.

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

Common Questions About Photopheresis - Last updated on August 15, 2024
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