

Photodynamic Therapy (PDT)

What is PDT?

PDT is a two-step treatment used most often to help people who have cancer of the esophagus or lung. This therapy is normally given as a series of outpatient treatments. It is called a two-step procedure since both a drug and laser treatment are used. Here is information about PDT, how to prepare for it, and how to care for yourself after the treatment.

How does PDT work?

A drug called Photofrin is injected and travels through your body, clinging mostly to cancer cells. A light (laser) is then used to cause a chemical reaction which destroys cancer cells.

Neither the drug or the light (laser) alone can destroy cancer cells, they must be used together.

How is PDT done?

Step 1: First you will be given a drug called Photofrin through an IV (intravenous). This drug is a **photosensitive** drug. This is because the main side effect of this drug is that it makes people sensitive to bright light and sunlight for about one month.

Step 2: Two days (48 hours) after you receive Photofrin, you will be taken to the operating room for laser treatment. You will receive general anesthesia for this procedure. While you are asleep the doctor will use a camera and a scope to give you the laser treatment.

This handout is for informational purposes only. Talk with your doctor or health care team if you have any questions about your care.

- For treatment of the lung, the laser treatment will be given through a bronchoscope.
- For treatment of the esophagus, you will receive the laser treatment through an esophagoscope.

Two days after you have had the first laser treatment, Step 2 will be repeated again. Based on the results of this treatment, your doctor will decide on what follow-up treatment is needed.

Possible Side Effects

The main side effect is photosensitivity. You will have strong sensitivity to bright light or sunlight for 4 to 6 weeks after this treatment. This begins as soon as you receive Photofrin.

Photofrin will cause a photosensitive reaction that looks and feels like sunburn. A reaction can happen even after being in mild sunlight for a few minutes. Your skin will be red, swollen and may blister. This may cause long term changes to the color of your skin.

You may have some discomfort or a small amount of pain 1 to 2 days after the treatment. You may be given prescriptions for pain medicine, if needed.

Other side effects may occur such as:

- Fever or chills
- Nausea or vomiting
- Diarrhea or constipation
- Lightheadness or dizziness
- Tiredness or weakness
- Swelling in any part of the body
- Loss of appetite
- Trouble sleeping

How should I take care of myself after having PDT?

Use these precautions for 4 to 6 weeks after getting Photofrin:

- Do not go in direct sunlight for 4 to 6 weeks.
- Stay away from strong indoor lighting such as halogen lamps, examination lights, and dentist's lamps.
- Stay away from direct sunlight through windows or skylights. Pull blinds or draperies closed over windows.
- Wear protective clothing and sunglasses when you are outside, even if it is a cloudy day. You should wear long sleeved shirts, long pants or skirts, gloves, a wide brimmed hat, socks, shoes and sunglasses. You should bring this type of clothing to wear when you leave the hospital.
- **Sunscreen does not protect your skin from a photosensitive reaction.**
- When you travel by car, do not sit right by the window. It is better if you ride in the middle of the back seat of a car.
- Do not use helmet type hairdryers. This is the type that would be used in a hair salon.
- It is okay to watch TV, go to a movie or work in front of a computer. These activities are not harmful.
- It is good for you to be exposed to some dim indoor light. Do not stay in total darkness.

When should I call the doctor?

Call your doctor right away if you have any of the following:

- Your skin becomes red or blistered at any point after the treatment.
- If your pain is worse or does not go away after taking pain medicine.
- If you are unable to swallow fluids.

How do I know when I am no longer light sensitive?

Four weeks after getting Photofrin, you can test your light sensitivity by doing the following:

- Cut a hole (2 inches in diameter) in a small paper bag. Place the bag over your hand. Put the hand with the bag in direct sunlight for 10 minutes.
 - ▶ If your skin reacts within 24 hours, then continue with photosensitivity precautions for another week. Then repeat this test.
 - ▶ If no reaction occurs within 24 hours, gradually increase your exposure to bright light and sunlight. Continue to watch for skin reactions.

Precautions with Photofrin

You will be given information about this medicine and any precautions you may need to take. Ask your doctor or nurse if you have questions about something you do not understand.