

Hyperbaric Oxygen Therapy

What is hyperbaric oxygen therapy?

Hyperbaric oxygen therapy is a high-pressure oxygen treatment. It is given in a chamber (a tube-like space). You will breathe in 100% oxygen. The air pressure in the chamber will be raised up to three times the normal level, depending on what your doctor prescribes. Breathing oxygen under high pressure may cause the level of oxygen in your blood to rise. This may help to heal a wound or treat a specific condition by getting more oxygen to the problem area.

Why do I need it?

Hyperbaric oxygen therapy is given along with other medical treatments which may help your wound to heal or treat an area injured by past radiation therapy. If you had surgery to put a skin graft or a flap over a wound, this treatment may help keep the flap in place.

How do I prepare for it?

Before you start treatment, someone who is trained in hyperbaric therapy will speak with you. You may also need to have some tests done, to see if this treatment can help you. You will need to have a chest x-ray before treatments begin.

You must not drink carbonated drinks (such as sodas) **for two hours before** your treatments.

If you smoke, please think about quitting, because smoking severely narrows your blood vessels. This lessens the flow of blood and the amount of oxygen in your blood. Less oxygen slows healing.

The hyperbaric staff will provide you with special 100% cotton clothing to wear during your treatments. You must not wear any jewelry or a watch into the chamber. You cannot bring anything into the chamber with you during your treatments.

What is the therapy like?

In our chamber at New York Presbyterian Hospital, there is room for two people to be treated at the same time. Other chambers hold just one person or several people. The chamber pressure is compressed with normal room air and the oxygen will be delivered to you through a special see-through hood. The chamber has a clear, acrylic cylinder around it so that you can see outside. During the treatment, you will be able to rest/sleep, watch television or movies, or talk with the other person inside the chamber. The staff outside the chamber will speak with you through an intercom system, and they can hear you at all times. There is always a registered nurse and/or respiratory therapist trained in hyperbaric oxygen therapy watching you from outside the chamber.

To start the treatment, we will examine your ears and lungs. If you have diabetes, we will check your blood sugar. We will then ask you to sit on a reclining chair and adjust the seat to your comfort level. Then we roll the chair into the chamber and close the door. The treatment has three steps:

1. **Compression:** We will slowly increase the pressure in the chamber to the prescribed level. The temperature may get warmer. We will teach you how to clear the pressure that builds up in your ears. This is done as you would when you are flying in a plane, or in an elevator, when your ears feel 'full'. Compression usually takes about ten to fifteen minutes.
2. **Treatment:** When we get the pressure to the prescribed level, we will begin the treatment by turning on 100% oxygen. You will breathe the oxygen through the clear plastic hood. This step takes about 90 to 110 minutes.
3. **Decompression:** After the treatment is completed, we will begin to decrease the pressure in the chamber to bring it back to normal. You may feel cool at this time, and you will have a blanket with you for comfort as needed. You may feel some pressure in your ears again. You will be told to relieve it by drinking, swallowing or changing your neck position. The total treatment time is usually 2 hours to 2 hours and 15 minutes.

Can this treatment cause any problems?

Some people cannot stand to be in a small, enclosed place for a long time. Those people should not have hyperbaric oxygen therapy. Some people have pain in their ears or sinus pressure when the pressure inside the chamber is being increased. If this happens to you while you are in the chamber, tell the staff right away and we will adjust the pressure until the pain goes away.

There are other side effects that the hyperbaric team will talk about with you. This includes possible effects on your eyes, ears, lungs, and a very rare chance of seizures. Remember, we do everything possible to make your treatments safe, and will watch you carefully during each treatment.

What do I do if I have a question?

If you are confused or have a question about hyperbaric oxygen therapy, please call us at 212.932.4325, at any time. You can also find information at our website: www.ColumbiaWoundHealing.org.

This information is brief and general. It should not be the only source of your information on this health care topic. It is not to be used or relied on for diagnosis or treatment. It does not take the place of instructions from your doctor. Talk to your health care providers before making a health care decision.