What is Hyperbaric Oxygen Therapy?

Hyperbaric Oxygen (HBO) Therapy is a medical treatment in which the entire body is under increased atmospheric pressure and the patient breathes 100% oxygen. This is administered in a pressurized chamber. HBO increases the amount of oxygen in your blood that is circulated to the body tissues. Several medical conditions have been shown to benefit from HBO therapy such as: infected wounds (especially in diabetics), osteomyelitis (bone infections), injury to bone or soft tissue from radiation, burns, decompression illness (bends), and carbon monoxide poisoning.

Who is Responsible for my Care?

HBO therapy is available through a referral from your physician. Your physician will be responsible for your general medical management and will work closely with the HBO Therapy team of specialists. The Hyperbaric medical team includes a physician specialist, registered nurses, and technicians who have specific training in the administration of HBO therapy.

Is “High Pressure” Oxygen Therapy Safe?

You will be closely monitored by a hyperbaric medicine team who will also work with your physician to assure your HBO therapy is safe and effective. HBO therapy usually has limited or no after-or side-effects. Your hyperbaric medical team physician will discuss possible side effects with you directly.

What Will I feel During a Treatment?

Once inside the chamber and the door is closed, you will hear the oxygen begin to circulate. The staff will inform you when the pressure is gradually increased. This is called compression. There may be some warmth which you will notice but this is temporary. An HBO staff member will adjust the rate of compression according to your tolerance and coach you on relieving the “full” sensation which you may feel in your ears. This sensation is similar to what you may have felt while driving down a mountain, flying or diving to the bottom of a water pool. You may try several ways to clear your ears in order to find the most effective measure for you. Some techniques for ear pressure equalization are: swallowing, yawning, jaw movement, pinch nose and swallow, and pinch nose and blow gently with mouth closed.

After the prescribed pressure is reached, the sensation of fullness in your ears will cease and you may rest or sleep, watch TV, listen to radio, or have visitors during this time. Each treatment typically lasts 90 to 120 minutes and is administered 1-2 times daily, 5-6 days a week.

Near the end of your treatment, the HBO staff will gradually decrease the pressure added at the beginning. This is the decompression phase. During this period, you may experience a “popping” sensation in your ears. Continue to breathe normally and relieve pressure in the same manner as during the compression phase but avoid holding your breath.

Are There Any Other Effects of HBO?

As with several medical procedures or treatments, there are some side effects that may occur with HBO therapy or exposure to hyperbaric oxygen, such as claustrophobia, barotrauma to ears and sinuses, barotrauma to lungs, oxygen toxicity seizures, changes in visual acuity, increased risk of fire, and changes in medication dosage requirements. These are rare but will be discussed with you by the hyperbaric physician and staff.

How Do I Get Ready For My Treatment?

Medication: Some medications are not compatible with hyperbaric oxygen therapy. The staff will need to know all the current medications you are taking. Each drug will be considered individually in relation to HBO therapy, and if changes in your medication are needed, your physician will be consulted.
Some medications may contribute to the development of side effects from oxygen therapy. Special precautions are required for HBO patients taking digitalis, insulin, pain medication, tranquilizers, aspirin, large doses of Vitamin C and steroids. If you are taking any of these medications, the HBO staff will explain the precautions you will need to take.

You will be advised to take at least 400 units of Vitamin E daily during the entire course of your HBO treatment. Vitamin E helps protect your body from absorbing more oxygen that it can safely use. Vitamin E is available in most drug stores and does not require a prescription.

**Colds and Other Illnesses:** It is important that you notify the HBO staff if you have symptoms of a cold, flu - fever, cough, sore throat, runny nose, fever blisters, cold sores, nausea, vomiting, diarrhea, and general body ache. These illnesses are not helped by oxygen so the HBO treatments can be postponed until you have been cleared by the hyperbaric physician to restart treatments.

**Smoking:** Nicotine causes small blood vessels to shrink causing decreased circulation and oxygenation. Smokers also have higher levels of carbon monoxide than non-smokers and so do not receive the full benefit of oxygen therapy. Once HBO has been prescribed for you, you will have to stop smoking until your therapy is completed. This “no smoking” rule applies to cigarettes, pipe tobacco, cigars, and snuff.

**Cosmetics:** Any make-up, hair spray, perfume, deodorant, or shaving lotion which has a petroleum or alcohol base may not be used immediately prior to a treatment. Discuss with the staff any skin products you may wish to use to help assure that they are safe to use in the chamber.

**Clothing:** You will be provided with a 100 % cotton gown to use for your treatment. No other articles of clothing are to be worn in the chamber. Watches, rings and other jewelry, hard contact lenses and other prosthetic devices will need to be removed prior to treatment. It is important that body cleanliness be maintained during the course of your treatment.

**Scheduling:** The HBO staff will schedule your treatments on a daily basis. Every effort will be taken to consider your other activities or other treatments, but there may be times when your appointment is changed, cancelled or postponed due to emergency situations. On the other hand, if you are unable to keep your appointment, please call the Hyperbaric Unit at 828-351-6000 as soon as possible.