# **PATIENT EDUCATION**

Patient Name:
This is to certify that the patient has been instructed in the following areas with regard to Hyperbaric Oxygen Therapy:
I. Hyperbaric Oxygen Therapy (HBOT)  A. Definition: High dose, 100% oxygen breathing while exposed to increased atmospheric pressures.  1. Hyperbaric chamber - where pressure is created.  2. Increased pressures surround the patient.  3. Similarities to scuba diving.  B. Purpose: To enhance the oxygen levels in affected tissue so that the normal healing mechanisms can take place.  C. Staff: The staff members are part of a team, specifically trained to provide this type of therapy to patients. The physician directs all aspects of the patient's hyperbaric care. The physician will also maintain an open line of communication with the patient's referring physician(s). The staff will assist and attend to any of the patient's needs with regard to hyperbaric oxygen treatment.
II. What to Expect A. Preparation:  1. Vital signs and patient status.  2. Special clothing - 100% cotton scrubs or in special cases, 100% cotton clothing.  B. Descent or Pressurization:  1. This is the part of the treatment when pressure is applied to the hyperbaric chamber.  2. There will be a technician at the chamber during descent.  3. During this time, you must clear your ears.  4. The pressure is not felt on the body.  C. At Depth:  1. You should breathe normally.  2. For extended treatments, you may be required to take an air break using a mask to breathe.  3. There will always be a technician in the chamber room during the treatment.  D. Ascent or Depressurization:  1. During this part of the treatment, pressure is removed from the hyperbaric chamber.  2. There will be a technician at the chamber during ascent.  3. You should rest comfortably and breathe normally during ascent; clearing of the ears is not necessary.
III. Equalizing the Ears  A. Although the pressure changes in the chamber are not felt on the body, they are felt in the ears. As the pressure increases, the eardrum will try to bow inwards. To avoid this, it is important to learn how to

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equalize the middle ear.

1. Hold your nose and swallow

- 2. Another way to equalize is by yawning or swallowing.
- 3. You can also try opening your mouth, and moving your jaw from side-to-side.
- B. Pressure Equalizing Tubes: Should you not be able to clear your ears, you may need small ventilating tubes inserted in each eardrum by an ear, nose, and throat specialist. These tubes will remain in your ears the entire time you are being treated at the hyperbaric facility.

#### \_ IV. Possible side effects (All are rare and can easily be prevented.)

- A. Barotrauma: On descent, if for one reason or another you cannot clear your ears properly, your eardrum could become painful, be bruised, and potentially perforate. This is usually alleviated by using the various clearing techniques or the use of specific medications. If severe enough, you will be removed from the chamber. Usually after a day's rest, you can return for treatment.
- B. Pneumothorax: It is important **NOT** to hold your breath during ascent (at the end of each treatment). Oxygen is expanded during this time and if you hold your breath, it is possible to rupture the alveoli in the lung. This is very rare and is easily avoided by breathing normally throughout the time the chamber is being decompressed.
- C. Sinus Trauma: If you have draining or congested sinuses, you could experience increased sinus pressure during treatment. The pain is usually relieved by reversing the pressure in the chamber. To prevent problems, specific medications will be recommended. It is important to let the technician know if you are having problems.
- D. Airway Irritation: In rare instances, high-dose oxygen can cause airway irritation. This is due in part to the lower moisture content in oxygen. It usually manifests as a dry, hacking cough and can be alleviated with certain procedures.
- E. Stomach Distension: The best way to avoid this is to relax while in the chamber and breathe normally. Stomach distension can cause you to belch, vomit, or have abdominal pains. Avoiding carbonated beverages may also be helpful. Immediately inform the technician if you feel this occurring.
- F. Oxygen Toxicity: Although very rare at the treatment depths you will be experiencing, symptoms could occur and can be quickly alleviated by breathing air in the chamber or by ending the treatment.
- G. Vision Changes: If you notice any change in your vision during your treatments, please let the technician know. These changes are temporary and your vision will return to what it was before you started HBOT. Also, there is a chance that pre-existing cataracts may be caused to mature sooner.
- H. Pregnancy: If you are pregnant, or if you become pregnant during your treatment, please tell the physician or technician immediately. There could be risks to your baby if you are treated while pregnant.

### V. Safety

A. The chamber is very safe. We utilize high-quality monoplace chambers for individualized treatment. We uphold the highest training, safety, maintenance, and service protocols available. In addition, treatments are

performed by highly-trained and certified medical staff with a physician always available.

B. You play an active role in your own safety while in the chamber. Safety is assured by your wearing the provided 100% cotton clothing and not bringing any unsafe items into the chamber.

#### VI. Effects of Smoking on Healing

- A. Smoking and exposure to secondhand smoke are not recommended during the weeks you are treated.
- 1. The nicotine in the cigarettes causes small blood vessels to constrict, making the blood flow to the tissues less.
- 2. Smoke and tar decrease lung function, so less oxygen is absorbed by the lungs and transferred into the blood.
- B. If you do smoke, it is strongly recommended that you not smoke 2 hours before and 2 hours after hyperbaric oxygen therapy so that maximum benefits are achieved.

## VII. Alcohol Consumption during Treatment

The ingestion of alcohol, particularly in large amounts, is inadvisable before treatment since this may lower your threshold for oxygen toxicity. Also, consuming alcohol immediately after a treatment will greatly interfere with the healing process.

VIII. Report Cold or Flu-like Symptoms
Let the physician or the hyperbaric staff know before your treatment and a decision will be made whether the patient should be treated or not. Sometimes it is best to sit out for a day or two so that viral symptoms are not worsened.
IX. Diabetic Patients
It is important to monitor blood sugars and to report any symptoms of low blood sugar immediately. Do not hesitate to let us know if you are having trouble managing your diabetes and we will assist you where we can.
X. Family Members and Visitors  A. Family members and visitors are welcome to tour the facility and ask questions at appropriate times.  B. For the safety and privacy of all patients, family members and visitors are asked to use the front waiting room while treatments are taking place, unless otherwise directed by the technician. This is strictlenforced.
XI. Consistency and Commitment To achieve optimal outcome, it is important to maintain consistency and commitment with the hyperbaric oxygen therapy protocol as ordered by the hyperbaric physician. Noncompliance on the patient's part might prevent a full therapeutic effect of HBOT. No shows and cancellations in less than 24 hours will be addressed as per Financial Policy with a full charge for therapy.
Signature of Patient or Representative Date
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