

Hyperbaric oxygen therapy

Hyperbaric oxygen therapy, also referred as HBOT is a medical treatment that involves breathing pure oxygen in a pressurized room or tube. Currently Hyperbaric oxygen therapy is used for the following conditions.

- Anemia, severe
- Brain abscess
- Bubbles of air in your blood vessels (arterial gas embolism)
- Burn
- Decompression sickness
- Carbon monoxide poisoning
- Crushing injury and suturing of severed limbs
- Sudden deafness
- Gangrene
- Infection of skin or bone that causes tissue death
- Nonhealing wounds, such as a diabetic foot ulcer
- Radiation injury
- Skin graft or skin flap at risk of tissue death
- Vision loss, sudden and painless
- Acute carbon monoxide intoxication
- Decompression illness
- Acute traumatic peripheral ischemia
- Progressive necrotizing infections
- Acute peripheral arterial insufficiency
- Preparation and preservation of compromised skin grafts
- Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management
- Osteoradionecrosis as an adjunct to conventional treatment
- Soft tissue radionecrosis as an adjunct to conventional treatment
- Cyanide poisoning
- Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment
- Diabetic wounds of the lower extremities if all of these apply:
 1. You have Type 1 or Type 2 diabetes and have a lower extremity wound that's due to diabetes.
 2. You have a wound classified as Wagner grade III or higher.
 3. You've failed an adequate course of standard wound therapy.

In a hyperbaric oxygen therapy chamber, the air pressure is increased. Under these conditions, your lungs can gather more oxygen than would be possible breathing pure oxygen at normal air pressure. Your blood carries this oxygen throughout your body. An increase in blood oxygen temporarily restores normal levels of blood gases and tissue function to promote healing and

fight infection. This helps fight bacteria and stimulate the release of substances called growth factors and stem cells, which promote healing.

Risks

Hyperbaric oxygen therapy is generally a safe procedure. Complications are rare. Patients receiving HBOT are at risk of suffering an injury that can be mild (such as sinus pain, ear pressure, painful joints, temporary nearsightedness (myopia) caused by temporary eye lens changes, middle ear injuries, including leaking fluid and eardrum rupture, or serious (such as Seizures as a result of too much oxygen (oxygen toxicity) in your central nervous system, paralysis, air embolism). Since hyperbaric chambers are oxygen rich environments, there is also a risk of fire.

After hyperbaric oxygen therapy

You may feel somewhat tired or hungry following your treatment. This doesn't limit normal activities.

Results

To benefit from hyperbaric oxygen therapy, you'll likely need more than one session. The number of sessions depends on your medical condition. To effectively treat other conditions, hyperbaric oxygen therapy is used as part of a comprehensive treatment plan and administered with other therapies and drugs that fit your individual needs.