

The Benefits of Hyperbaric Oxygen Therapy (HBOT)

History Of HBOT

One of the earlier uses of HBOT was to treat diving-related complications such as decompression sickness. As medical professionals began doing more research into this treatment, they discovered that it could potentially help with other issues, from diabetic foot ulcers to circulation problems. These issues could be either acute or chronic, but various studies have shown that the increased intake of oxygen as a result of the pressurized 100% pure oxygen in HBOT can help the body's healing response for much more than diving injuries.

Common Uses Now

Below are several success stories illustrating HBOT's potential to alleviate the severity of some complications.

Diabetic Foot Ulcers

One of the more well-studied applications of HBOT is in the use of treating diabetic foot ulcers, which occur in approximately 15% of people who have diabetes, according to the American Podiatric Medical Association. Diabetes can create nerve damage and decrease capillary efficiency, leading to circulation issues. These two factors combined can create numbness in lower extremities and make it harder for patients to identify when they are developing foot ulcers. Because HBOT raises blood oxygen levels, it can promote better circulation and treat the root cause of diabetic foot ulcers. Doctors may also use HBOT for wound care to speed the healing process.

Necrotizing Fasciitis

Necrotizing fasciitis is a flesh-eating disease that occurs when bacteria infiltrate the body and cause an infection that can be life-threatening. The bacteria can enter the body through open wounds or sores and cause tissue death. Medical professionals have analyzed HBOT as an adjunctive treatment for necrotizing fasciitis, alongside antibiotics, wound care, and sometimes surgery. In severe cases, a limb may need to be amputated in order to stop the infection from spreading.

Radiation Cystitis

After undergoing intensive radiation therapy, often for pelvic cancers, some patients may suffer from a painful side effect: *radiation cystitis*. This can cause inflammation and tissue damage to the bladder. Radiation cystitis can manifest shortly after radiotherapy, or it can take more than six months before the onset of symptoms, which can include increased frequency of urination, pain, and sometimes bleeding. HBOT can induce angiogenesis, which is the formation of new blood vessels, in order to deliver blood and oxygen to areas where damaged tissue needs to heal.

HBOT can also treat other indications. Visit us online or contact us at the **Wound Healing and Hyperbaric Medicine Center at Billings Clinic at 406-238-5618** for more information or to speak to one of our HBOT providers.