

HBOT heals Idiopathic Sudden Sensorineural Hearing Loss

The cochlea needs a lot of oxygen, and hyperbaric oxygen therapy (HBOT) can provide high levels of oxygen to the cochlea by dissolving it into the plasma. Oxygen is important for the cochlea to function properly, but sudden hearing loss can cause a decrease in oxygen levels. Normobaric hyperoxygenation is not as effective as HBOT for increasing oxygen levels in the cochlea.



How Hyperbarics Helps



Speeds recovery and rehabilitation



Reduces inflammation



Induces neuroplasticity



Mobilize stem cells



Increases tissue oxygen delivery



Improves blood - brain barrier reactions



Upregulates axon guidance agents



Increases levels of neutrophils and nitric oxide



Enhances mitochondrial function (neurons and glial cells)



Stimulates angiogenesis and cell proliferation needed for axonal regeneration



What Research Says

Hyperbaric oxygen therapy (HBOT) increases blood flow and transports more oxygen through the plasma to the inner ear and nerve cells, thus reducing hypoxia. HBOT has been shown to reduce inflammation and promote stem cell growth and mobilization. It is also bacteriocidal.

The cochlea and the structures within it require a high oxygen supply. HBOT dissolves extra oxygen into the plasma. Tissue oxygenation to these structures occurs via oxygen diffusion from cochlear capillary networks into the perilymph and corilymph. Perilymph oxygen tension decreases significantly with sudden sensorineural hearing loss (SSHL). Although normobaric hyperoxygenation increases intracochlear oxygen tensions, only HBOT achieves extremely high arterial perilymphatic oxygen concentration in human and animal studies.

Patients who present with ISSHL, within 14 days and have a moderate or greater severity 40dB are the most likely to improve according to studies. However, The American Academy of Otolaryngology

Head and Neck Foundation recommends considering treatment up to three months from the symptom onset.

Our experience reflects the studies. Early intervention with HBOT yields the greatest improvement. Additionally, we have also had some success with patients getting HBOT between the 14 to 90 day window of onset. See Clinical Practice Guideline: Sudden Hearing Loss Article below.

HBOT Treatment Recommendation:

For sudden hearing loss, most physicians recommend 100% oxygen at 2-2.5 ATA for 90 minutes daily for 10-20 treatments. All patients have to return to their ENT to be tested to know for sure how much of their hearing they have regained. Most patients respond slowly, and some do not notice changes until they are near the end of their treatments. And there are those unfortunate few who do not regain their hearing even after all their treatments. There are some who regain enough hearing so they can hear with the use of a hearing aid.

Patient Experiences

Bay Area Hyperbarics has healed hundreds of patients with stubborn and non-healing wounds over the last 20 years.

”

Wen was very upset when she lost her hearing in her right ear. She was given steroid injections in her ear by her ENT. Her ENT then sent her on to our clinic for HBOT treatments. She had slow recovery of about half her normal hearing starting at approximately her 10th treatment. Although Wen did not recover all of her hearing when she finished her prescribed treatments, she had recovered quite a bit of her hearing and did not require a hearing aid.

Tomas, 67

Recovered most of her hearing from HBOT, where steroids didn't help.



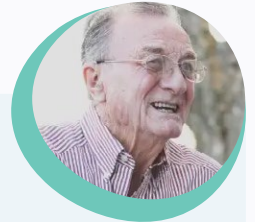


”

John, was a colorful and lively man, who made his living as a piano tuner. He came into our clinic with sudden deafness and distressed because of course, hearing was critical for his livelihood and he needed to pay his rent. John was able to target the exact day that his hearing returned: After his 16th treatment, his hearing returned sufficiently so that he could return to tuning pianos! He was elated, and decided to continue with all of his prescribed 20 treatments, to regain the remaining of his hearing.

John, 42

Healed from sudden deafness and resumed work as a piano tuner.



”

George experienced a remarkable and very unusual recovery in our clinic. During his fifth treatment session, he regained his full hearing! In our experience, treating sudden deafness takes time. Even though he regained his hearing, George decided to complete all 20 prescribed sessions to ensure the recovery was permanent.

George, 65

Regained his full hearing capacity right after his fifth session of HBOT.

Refer a Patient

Refer a patient in three easy steps.

1 You submit patient's information

As a provider, your office fills out and faxes back the Patient Referral Form. Have questions? Call us!

2 We get authorizations

We make sure the patient understands treatment and then follow the prescribed protocol to get the patient on the road to recovery!

3 Patient starts HBOT

Our medical staff meets with the patient to ensure that HBOT is appropriate, and contacts Medicare or private insurance to receive authorization.



Scan for Patient Referral Form

 **Call Us: (408) 356-7438**