

What You Should Know About Oxygen Therapy for Stroke Patients

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If you're looking for a treatment to improve movement after stroke, as well as other stroke side effects, then oxygen therapy could be for you.

What Is Oxygen Therapy for Stroke Patients?

Oxygen therapy, formally known as Hyperbaric Oxygen therapy (HBOT), exposes you to pure oxygen, which increases the amount of oxygen in the brain. HBOT is administered in a clear chamber where patients lie for about 60-90 minutes breathing 100% oxygen.

A Little Background Info

To understand how oxygen therapy works, you need to understand how **neuroplasticity** works too. During neuroplasticity, the surrounding parts of the brain take over the responsibility of the damaged part of the brain by building new connections between brain cells. In order to trigger this rewiring process, you need to stimulate the brain through **repetitive practice**.

For example, if you need to regain leg movement, then you can only trigger neuroplasticity by practicing leg movements over and over. Repetitive practice is the essential ingredient in effective rehab.

Now, how does oxygen therapy fit into that process?

How Oxygen Therapy Works

According to [Science Daily](#), the brain consumes 20% of the body's oxygen – but that's only enough to operate a small percentage of brain cells at any given point in time. When the brain is busy rebuilding connections through the process of neuroplasticity, it takes up *even more* oxygen.

Oxygen therapy provides extra oxygen to the brain, essentially working as 'brain food,' which speeds up the process of neuroplasticity. While repetitive practice is the primary driver of neuroplasticity, HBOT can play a secondary role by rapidly speeding up the process. So, there's no escaping the hard work of rehab – but HBOT can provide a potentially powerful boost.

What Stroke Deficits Does It Treat?

Oxygen therapy is currently being used to improve movement after stroke – even for survivors suffering from post-stroke paralysis. (Read: “Stroke Paralysis Treatments You Probably Didn't Know About” dated 7/18/2016)

[Some studies](#) report that patients experience benefits like *reversal of paralysis, increased sensation, and renewed use of language*, which can do wonders for a survivor's sense of independence.

Who Can Try Oxygen Therapy?

Stroke survivors can try HBOT at any stage in their recovery. It doesn't matter if your stroke was a few months or many years ago; although most studies were conducted in the early stages.

However, Dr. Efrati has seen improvement in patients up to 20 years post stroke – and he's the Director of the Sagol Center for Hyperbaric Medicine and Research; which, according to [TedX](#), is *the largest most occupied hyperbaric center in the world!*

So, take it from a doctor who spends his entire work-life with HBOT. Oxygen therapy has the potential to help stroke survivors at any stage post-stroke.

What Are the Side Effects?

Like all emerging treatments, HBOT comes with some risks.

Surprisingly, the greatest risk with HBOT actually comes from the treatment *equipment*. Since compressed pure oxygen is a fire hazard, malpractice in a HBOT chamber can lead to explosion and even death. For this reason, it's important to find a VERY credible HBOT administrator!

What Do the Studies Say?

Because HBOT is new, the studies so far are VERY MIXED.

Some of the studies say that it DOES NOT work:

“Although our HBO protocol appears feasible and safe, it does not appear to be beneficial and **may be harmful** in patients with acute ischemic stroke.” – [Daniel E. Rusyniak, MD, et al.](#)

“The overall evidence is insufficient to determine the effectiveness of hyperbaric oxygen therapy in any subgroup of stroke patients. To determine if hyperbaric oxygen therapy for stroke provides any benefit and that these outweigh **potential harms**, good quality studies are needed.” – [Susan Carson, et al.](#)

Some of the studies say that it DOES work:

“The results of HBO therapy in the treatment of patients with stroke, atherosclerosis, cerebral palsy, intracranial pressure, headache, and brain and spinal cord injury **are promising** and warrant further investigation.” – [Noori S. AL-Waili, et al.](#)

“The results indicate that HBOT can lead to **significant neurological improvements** in post stroke patients even at chronic late stages.” – [Shai Efrati, et al.](#)

In that study, HBOT was given to 30 stroke survivors for two months. After these two months, the HBOT survivors improved significantly more than those who didn't receive the oxygen therapy – and they reported a better quality of life.

What all this means:

Currently, oxygen therapy is hit-or-miss. Try it at your own risk.

Although you may find yourself thinking, “What's the point?”, there are many survivors who have completely lost hope, and solutions like HBOT can give them the boost they need to continue recovery.