

How does HBOT aid diabetic patients?

Wounds of diabetic patients usually heal longer because of bad micro-circulation and supply of oxygen to the damaged areas. HBOT aids in managing these problems.

“Prolonged high levels of sugar in the blood,” according to BaroMedical website, “will cause changes on a cellular level that will affect all organs in the body. In diabetes blood becomes thicker with higher affinity to clot and create deposits on the walls of blood vessels, making them narrower and less flexible.

Most vulnerable is the fine capillary network, also known as the micro-circulation, particularly in the skin, kidneys, and retina. When these small vessels are damaged, they are no longer able to provide oxygen and nutrients to the nearby tissue, nor to remove metabolic waste products. This is the underlying mechanism explaining why diabetic wounds take longer to heal, how kidney and retinal damage occurs, and why the risk of stroke and heart disease is increased in diabetics.

The risk can be assessed with new non-invasive technology that can measure the level of oxygen and blood flow in the microcirculation (micro-circulation assessment). If you are currently living with diabetes, or at risk of developing diabetes, you need to pay close attention to your circulation and how well it delivers oxygen. Oxygen deficiency is typically caused by poor microcirculation. Lack of oxygen is the basis for serious illnesses where tissue and organs start to break down.”

Management and preventive care

In managing diabetes preserving healthy micro-circulation on which all organs in our body depend is among the most important issues, in addition to controlling levels of blood glucose and regular physical exercise.

“The role of hyperbaric oxygen therapy in diabetes preventive care is in re-oxygenating hypoxic tissue, regulating blood sugar level and promoting growth of blood vessels and nerve endings,” as stated on the website. “HBO acts as a blood thinner and improves red blood cell compliance, enabling the blood to enter finer capillaries where the most effective transfer of oxygen takes place. This therapy can both reduce the risk of blood clotting and thrombosis associated with diabetes and stroke as well as heighten metabolism and tissue perfusion to meet an increased demand for oxygen during activity or injury/illness.”

It has also been shown that hyperbaric oxygen therapy improves lung function, which helps with better oxygen extraction and delivery. Among other benefits are improved pumping function of the heart, density of bones and immune system response.

Stem cells release

The website also mentions “A breakthrough study by Dr. Stephen Thom (2005),” which showed “that hyperbaric oxygen facilitates the release of stem cells from bone marrow.” Cells which are very important for our body to repair and rejuvenate.

Find out how HBOT can also help prevent primary amputations in diabetic patients [here](#) or by following the link under references.

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References:

[Diabetes](#). Published online on BaroMedical website.