THE NORTHWEST WELLBEING HUB

HYPERBARIC OXYGEN THERAPY

DIABETES

KEY POINTS

- Enhanced wound healing
- Reduction of infection risk
- Improved oxygenation to ischemic tissues
- Reduction of inflammation
- Preservation of non-healing tissues

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Hyperbaric Oxygen Therapy (HBOT) has shown potential benefits for individuals with diabetes, particularly in managing certain complications associated with the disease. Here are five key points highlighting how HBOT can help individuals with diabetes:

1. Enhanced wound healing: Diabetes can lead to impaired wound healing, particularly in individuals with diabetic foot ulcers. HBOT can improve wound healing by increasing oxygen delivery to the affected tissues. The high oxygen levels promote the growth of new blood vessels (angiogenesis) and support tissue repair, aiding in the healing process of chronic wounds.

2. Reduction of infection risk: Diabetic individuals are more prone to infections due to compromised immune function and poor blood circulation. HBOT has antimicrobial properties and can help combat certain types of bacteria, reducing the risk of infection in diabetic wounds. It can also enhance the effectiveness of antibiotics in treating existing infections.

3. Improved oxygenation to ischemic tissues: Diabetes-related vascular complications can result in reduced blood flow and oxygen supply to tissues (ischemia). HBOT increases oxygen availability in the bloodstream, delivering oxygen to ischemic tissues. This can promote healing, reduce pain, and potentially prevent tissue damage caused by chronic ischemia.

4. Reduction of inflammation: Chronic inflammation is often associated with diabetes and its complications. HBOT has anti-inflammatory effects and can help reduce inflammation in diabetic tissues. By modulating the immune response and suppressing inflammatory markers, HBOT may alleviate inflammation-related symptoms and promote tissue health.

5. Preservation of non-healing tissues: In individuals with diabetes, non-healing wounds or ulcers may develop, leading to the risk of tissue loss or amputation. HBOT can help preserve non-healing tissues by providing the necessary oxygen for cellular metabolism and tissue repair. It can improve the viability of at-risk tissues and potentially prevent the need for more extensive interventions.

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