

## **Hyperbaric oxygen therapy for chronic diabetic wounds of the lower limbs--a review of the literature**

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Chronic wounds of the lower limbs are a cause of severe morbidity in diabetic patients.

Low oxygen tension around the wound is one of several critical factors, which mutually enhance the progression of a chronic ulcer. Hyperbaric oxygen therapy (HBO) is believed to improve wound healing by enhancing oxygen tension around the wound. While conventional therapies for diabetic foot ulcer are based on scientific evidence, HBO treatment lacks evidence-based support regarding its cost effectiveness and efficacy. Recently, several publications emerged, which improve our knowledge regarding this subject. This paper briefly reviews the pathophysiology of chronic diabetic ulcers and the possible advantage of HBO therapy in this clinical setting. The article also summarizes the results of relevant publications, in which appropriate scientific measures were applied. In conclusion, there is evidence that HBO therapy reduces the need for major amputations among diabetic patients with chronic ulcers of the lower limb. HBO seems to enhance the rate of healing. Few publications with methodological defects diminish the value of these conclusions. However, there is a need for larger randomized, double blinded studies in order to validate this treatment.

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