

Topical wound oxygen therapy helps heal diabetic foot ulcers

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(HealthDay)—Adjuvant cyclical pressure topical wound oxygen

(TWO2) therapy, compared with sham control therapy, in addition to optimal standard of care is superior for healing chronic diabetic foot ulcers (DFUs), according to a study published online Oct. 16 in *Diabetes Care*.

Robert G. Frykberg, M.D., from Diabetic Foot Consultants at Midwestern University in Glendale, Arizona, and colleagues examined the efficacy of multimodality cyclical pressure TWO2 home care [therapy](#) for patients with diabetes and chronic DFUs. Participants were randomly assigned to either active TWO2 therapy or sham control therapy, both in addition to optimal standard of care. Predetermined analyses and hard stopping rules were performed when 73, 146, and 220 patients had completed the 12-week treatment phase.

The researchers found that the active TWO2 arm was superior to the sham arm at the first analysis point, with a closure rate of 41.7 versus 13.5 percent (odds ratio, 4.57). The odds ratio increased to 6.00 after adjustment for University of Texas Classification (UTC) [ulcer](#) grade. Compared with the sham arm, Cox proportional hazards modeling demonstrated a significantly increased likelihood for DFUs to heal over 12 weeks (hazard ratio, 4.66), also after adjustment for UTC grade. At 12 months postenrollment, 56 and 27 percent of active-arm ulcers and sham-arm ulcers were closed.

"Uniquely, the therapy has additional benefit in that it can be administered by the patient at home without the expense and difficulties of daily travel to a specialized center," the authors write.

One author disclosed financial ties to the pharmaceutical industry; the study was sponsored by AOTI Ltd.

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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