E-Poster

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Oxygen-Ozone Therapy for Treating Chronic Refractory Wounds and Ulcers: A Case Study

Topic: Complications/Sequelae (ie Spasticity, Immobilization and Frailty)

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BACKGROUND

A chronic wound can be defined as a wound that is physiologically compromised due to a disruption in the wound-healing cycle resulting from altered angiogenesis, innervation, or cell migration. Local care for chronic wounds involves debridement and the use of specific dressings tailored to the particular conditions of the wound, which helps promote healing. Additional methods for preparing the chronic wound bed include topical oxygen therapy, which delivers localized oxygen to the wound bed and surrounding areas.

CASE DESCRIPTION

We present the case of NP, a 67-year-old Caucasian man with type 2 diabetes mellitus complicated by peripheral arteriopathy, which resulted in the transtibial amputation of his left leg and chronic ulceration in the pretibial region of the right limb. Following an initial assessment, a dedicated rehabilitation program was set up, enabling the resumption of functional walking through the fitting and testing of a customized prosthesis. However, the healing of the chronic wounds was significantly delayed, and after conventional medical approaches, we opted to treat it with oxygen-ozone therapy. The treatment of the chronic wound included: 1. disinfection with sodium hypochlorite; 2. local insufflations with a 30G needle of 10cc of O2-O3 mixture at a concentration of O3 per cc of O2 of 1.5-2 microgr, two sessions per week for a total of 60 sessions; 3. local application of honey with antibacterial action and Acquacel to encourage local regeneration; 4. application of flat dressing. We documented the entire healing process, which took over a year, through photography and regular evaluations.

DISCUSSION

Diabetics are among those at a higher risk of developing chronic wounds. Chronic ulceration in patients with diabetes is multifactorial, resulting from a combination of diabetic neuropathy, autonomic dysfunction, and vascular insufficiency. This case report details the successful treatment of a lower limb ulcer in a patient with severe diabetic arteriopathy using local oxygen-ozone application, emphasizing its potential as an additional tool for managing chronic wounds.

CONCLUSION

This case report details the successful treatment of a lower limb ulcer in a patient with severe diabetic arteriopathy using local oxygen-ozone application, emphasizing its potential as an additional tool for managing chronic wounds.

Statement of Disclosures

None

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