

**LOCAL OZONETHERAPY IN CHRONIC VENOUS ULCERATION OF THE LEG**

Grzegorz Kaluza, Zbigniew Rybak, Piotr Szyber

*Medical University, Wroclaw, Poland*

**Material:** 187 patients with leg ulcerations of different etiology were hospitalized in the Department of Vascular, General and Transplant Surgery between April 2003 and December 2007. 150 persons from this group were qualified for local ozonotherapy. Initial criteria for the local ozonotherapy: -Active ulcerations of lower limbs, -ABI 1,0 or more, -Sufficient arterial blood flow in lower limbs (Duplex Doppler Scanning).

**Method:** Local ozonotherapy, phlebotropic drugs (micronized diosmine), vasodilating drugs (bufloamedil), compression therapy. Local ozonotherapy: dry baths in oxygen-ozone mixture of maximal concentration of 75 gamma O<sub>3</sub>/ml O<sub>2</sub>, one 45-minute daily bath, therapy in a 10-day cycle. For all the cases bacterial investigations were conducted, including: double cultured from the ulceration for aerobic and anaerobic bacteria before and after treatment (1st and 10th day), in each case an anti-biogram was prepared for all the grown bacteria. The diameter of the ulceration of all the patients was examined twice: on the 1st and the 10th day of therapy. Outcome: Ulcerations of the lower limbs are filled with a mixed, highly antibiotic resistant bacterial flora. The most common bacteriae are: Staphylococcus aureus and Pseudomonas aeruginosa. Anaerobic bacteria was found in none of the ulcerations. The performed antibiograms show that Ciprofloksacin and Vankomycin are the only antibiotics to which all the grown bacteria are sensitive.

**Conclusions:** The performed tests confirm the benefits of the ozone-oxygen mixture in the healing of venous ulcerations. The number of antibiotic resistant bacteriae present in the ulcerations was reduced during the local ozonotherapy. Positive effects of local ozonotherapy on the epidermization was observed. No side effects during local ozonotherapy were noticed. Local ozonotherapy is an easy and relatively cheap method.