

RESULTS OF TREATMENT OF PATIENTS WITH ARTERIAL ULCERS USING OZONE THERAPY IN THERMAL CENTER CONDITIONS.

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Abstract

Introduction: Ozone is a naturally occurring gas, the strongest disinfectant. Ozone treatment is used to treat viral, bacterial and fungal infections. This therapy can also be used to improve the supply of oxygen to the tissues. Both of these mechanisms have a beneficial effect on the healing of chronic wounds. The aim of the presented research is to evaluate the effectiveness of treatment with the use of ozone therapy of ulcers in the course of arterial and venous vascular changes.

Materials and methods: We selected a group of 20 patients with arterial ulcers, in this group there were 12 people with ischemic ulcer on the background of atherosclerotic lesions, and 8 people with venous ulcers, the mean age was 63.6 years \pm 10.2. The duration of atherosclerosis was on average 9.4 \pm 6.2 years. The number of hypertensive patients was 25% and with ischemic heart disease 34%. In the degree of severity of ulcer according to Wagener, 66% had grade I and II, and the others had grade 3/4/5 respectively 25% / 0% / 8.3%. Duration of varicose vein disease was 9.6 \pm 5.6 years and the duration of ulcer was from 3 months to 17 years. Treatment in addition to standard surgical care and antibiotic therapy included administration of ozone-oxygen mixture in intravenous form and in the form of an aerosol bath. Kinesiotherapy and physical treatments (pulsed magnetic field and laser therapy) were appropriately selected. The average duration of treatment was 46 days on average.

Results: The results of the treatment were assessed on a four-level scale: I complete recovery, II improvement with full recovery, III minor improvement, and IV no improvement. In addition, patients were evaluated for changes in metabolic control of diabetes, and lipid parameters were also evaluated.

58% of patients achieved improvement in the prognosis of recovery, in 42% a slight improvement was not observed among the subjects without improvement, the results were similar in both groups of patients. In the subjective assessment questionnaire, all patients reported improvement in reducing pain. In additional studies, the level of fibrinogen improved significantly.

Conclusions: Based on the results obtained, we conclude that ozone treatment is a valuable method of improving the results of treatment in patients with atherosclerotic ulceration. For a full assessment of the method, it is necessary to plan further randomized trials comparing treatment with ozone therapy to other reference methods of treatment on vascular ulcers.