

THE RESULTS OF THE TREATMENT OF TROPHIC ULCERS OF THE LOWER LIMBS BY APPLYING AUTOLOGOUS PLATELET-RICH FIBRIN

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Background. The most common cause of lower limb ulcers is chronic venous insufficiency. Up to 48% of patients with trophic ulcers are at the age of maximum productivity. 67% of patients with trophic ulcers become disabled, and in 81% the quality of life decreases considerably. Injection of autologous platelet-rich plasma (PRP) is an important factor in tissue regeneration and represents a new perspective in the treatment of trophic ulcers.

Material and methods. Prospective study. The study included 28 patients, divided into 2 groups, with trophic ulcers of the lower limbs with a duration of 6-24 months without epithelization dynamics, paraclinically confirmed the presence of chronic venous insufficiency. I group 14 patients combined treatment with PRF injection in venous ulcers. II control group – 14 patients who benefited from general basic treatment and local compressive treatment. All patients were monitored for 1 year.

On the 7th and 14th day of treatment, histological examinations of trophic ulcers were performed in both groups of patients, with a comparative evaluation of the results obtained.

Platelet-rich fibrin membranes were obtained by centrifuging under special conditions the peripheral venous blood collected from the patient.

Results. In group I complete epithelialization after 12 months of treatment combined with platelet-rich fibrin was obtained in 10 patients and in 4 patients incomplete epithelialization was obtained (70% of the ulcerated surface) In group II control after 12 months of treatment epithelialization complete epithelialization was obtained in 7 patients and incomplete epithelialization in 7 patients (40% of the ulcerated surface)

The results of the histological examination demonstrated in Lot I the appearance of the neovascular network with granulation tissue in all patients. In batch II, the lack of formation of the neovascular network.

Conclusions. The use of autologous Platelet-Rich Fibrin is a simple and affordable method to use. PRF membranes initiate and accelerate granulation tissue formation and angiogenesis. As a result, complete epithelization of the ulcers occurs, improving the patients' quality of life.

Keywords: Platelet-Rich Fibrin, trophic ulcer, platelets, regeneration, PRF.