

33. THE USE OF PLATELET-RICH FIBRIN IN THE REGENERATIVE TREATMENT OF REFRACTORY CHRONIC ULCERS OF THE LOWER LIMBS



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Introduction. Chronic refractory ulcer is defined as a skin defect, with or without involvement of adjacent tissues that persists for more than 6 weeks and does not improve for more than 3 months following proper treatment. Chronic refractory ulcers of the lower limbs are a medico-social problem, leading the patient to disability, requiring time and increased finances for cure. PRF is an alternative therapeutic method that enhances soft tissue regeneration thanks to platelets - the main source of growth factors and cytokines.

Aim of study. Evaluation of the safety and effectiveness of PRF use in the regenerative treatment of lower limbs chronic refractory ulcers, of various etiologies, using an accessible, non-invasive and inexpensive technology.

Methods and materials. This study is a review of the last 10 years of published specialty literature on the selected topic. The following electronic databases were used: Google Academic, PubMed, Cochrane Library, Scopus. The key words used are: "platelet-rich fibrin", "platelet concentrate", "chronic skin ulcer". In total, 475 articles were identified, 115 articles met the inclusion criteria. From these, 50 reports were included in the research.

Results. PRF is a simple, inexpensive cellular therapeutic method that shortens the healing time of chronic ulcers, does not require hospitalization, and has an increased healing potential over soft tissue, bone tissue, tendons, and ligaments. Its properties are due to platelets - central cells in wound healing. They release more than 20 growth factors and cytokines that trigger the process of angiogenesis and tissue regeneration. In PRF the concentration of platelets is approximately 3-5 times higher than in the patient's blood, and this fact explains the potency of the increased regenerative effect.

Conclusion. PRF is an effective method in the regenerative treatment of chronic refractory lower limb ulcers, regardless of etiology, with no reported adverse effects.