



WOUND HEALING

A STUDY ON THE EFFICACY OF AUTOLOGOUS PLATELET RICH FIBRIN IN TREATMENT OF CHRONIC NON HEALING LEG ULCERS

Amina Asfiya⁽¹⁾ - Sacchidanand S⁽²⁾ - Leelavathy B⁽³⁾

Yenepoya Medical College, Dermatology Department, Yenepoya University, Mangalore, India⁽¹⁾ - Bangalore Medical College, Dermatology, Bangalore, India⁽²⁾ - Bangalore Medical College, Victoria Hospital, Bangalore, India⁽³⁾

Background: Chronic non healing ulcers of the lower extremity are a significant cause of morbidity and mortality. Treatment options available are limited and unsatisfactory.

Objective: The objective of the study was to evaluate efficacy of autologous platelet rich fibrin (PRF) in the treatment of chronic non healing leg ulcers and to assess the rate of healing in different causes of ulceration.

Materials and Methods: Prospective study involving 30 patients with chronic non healing (> 6 weeks duration) leg ulcers of various etiologies. Autologous PRF was applied weekly for 6 weeks. Every visit the ulcer healing was assessed with wound measurements and photographs. The treatment outcome was defined as a percentage in change of area and volume of the ulcer at the end of study period.

Results: The mean percentage of improvement in area of the ulcer was 72.48%. The mean percentage of improvement in volume was 77.08%. 100% improvement in area of the ulcer was seen in 43.34 %. The mean duration of healing was 5 weeks. The average number of applications of PRF per patient was 4.2. Trophic ulcers, diabetic ulcers and traumatic ulcers showed better response. We found that chronic non healing leg ulcers are more common in males > 60 years of age. Trophic ulcers were the commonest cause of ulceration. PRF releases growth factors which help in fibroblast proliferation, angiogenesis and provide scaffold for wound closure. The ulcers responded with early healthy, red granulation tissue.

Conclusion: Autologous PRF is a safe, effective and affordable procedure for the treatment of chronic non healing leg ulcers which can be done on an outpatient basis with minimum adverse effects

