



DERMATOLOGICAL SURGERY

AUTOLOGOUS PLATELET RICH FIBRIN AND WOUND HEALING

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BACKGROUND: Chronic wounds and non healing ulcers are a challenge for both physician and the patient posing a burden on medical resources and loss of man hours cost. Platelet rich fibrin (PRF) is a second generation platelet concentrate and acts as a biological dressing. Concentrated platelets and fibrin adhesives have shown promising results in microvascular surgical procedures.

OBJECTIVE: To assess the role of autologous PRF as an aid to wound healing in chronic ulcers.

MATERIALS AND METHODS: Fourteen patients with fifteen non healing ulcers i.e. an ulcer which has not improved in last 4 weeks, either neuropathic and post burn ulcers were covered with PRF dressings every 7th day. Changes were analyzed in terms of formation of healthy granulation tissue and reduction in maximum diameter. Ulcers less than 5 cm were treated with only PRF whereas those larger were covered with skin grafts eventually.

RESULT: Mean age of the patients was 43.4 years with 11 male patients. All six ulcers less than 5cm size healed with a mean of 3 PRF dressings. Larger ulcers (nine) were covered with 4 PRF dressings on an average till the formation of healthy granulation tissue and a mean reduction in maximum diameter by 2.3 cm was noted. These patients were then taken up for split thickness skin graft. The graft uptake was good and ulcers healed well. One ulcer failed to improve. There was no secondary infection and patient scores of pain became better with each PRF dressing.

DISCUSSION: Autologous platelet rich fibrin matrix has emerged as a new therapeutic modality. This technique of healing, by modified secondary intention, is inexpensive and associated with good patient acceptability. Hence it should be included in our armamentarium for the management of chronic ulcers and for preparation of wound bed for further surgical intervention.

