Autologous Platelet Rich Fibrin : A worthy companion in Chronic Wound Management in low resource settings

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OBJECTIVES

To understand the role of autologous PRF in management of Chronic wounds in low resource settings

What is PRF (Platelet Rich Fibrin)

A Second-Generation Platelet Derivative Developed in France by Choukroun et al. in 2001 for specific use in oral and maxillofacial surgery

PRF represents a new revolutionary step in the platelet gel therapeutic concept. Unlike other platelet concentrates, this technique does not require any gelifying agent, but not more than centrifugation of the natural blood without additives. PRF attempts to accumulate platelets and released cytokines in a fibrin clot.



NON HEALING ULCER LEFT INDEX FINGER

METHODS

Prospectively collected data of mean wound healing times in Patients admitted with chronic ulcers . Total of 45 Patients with 50 chronic non healing ulcers were analysed. **Inclusion Criteria** : Chronic non healing ulcers (>4 weeks duration) Both the sexes . Age 18 -75Select patients with PAOD/ PVD were also included.**Exclusion criteria**

Suboptimal standard wound care

Peripheral artery disease (distal pulses absent or anklebrachial index <0.8 and/or >1.2),

Contraindication to other interventions

Hepatic/ Renal dysfunction

•Drug interaction

Leukemia

Chronic steroidal, and/or immunosuppressive drugs.

TREATMENT PROTOCOL

PRF sessions every 5 days till complete healing of small wounds

Development of healthy granulation tissue and reduction in ulcer size in large wounds

Technique

20 ml of blood in 5 plain vacutainers

Centrifuged at 3000 rpm x 10 mins

Fibrin is extracted immediately and placed in the wound

Wound is covered with a dressing



POST THROMBOTIC SYNDROME ULCERATION

RESULTS

AT OUR CENTRE	
No. of patients	45
M:F	4:1 (36/9)
No. Of Ulcers Treated	50
Sittings	3 -4 per patient

RESPONSE

Healing	n (ulcers)	%
Complete healing	30	60
Significant healing	5	10
Moderate Healing	12 (underwent SSG)	25
No change	3	5



1st look 2nd look 3rd look

CONCLUSIONS

In most of our patients the number of PRF sessions required varied from 2 to 6 in number that amounts to nearly 1 and a half months of treatment.

Cases where it did not help in complete healing at least a healthy granulation tissue was obtained.

Considering that most of the ulcers were long-standing ulcers, PRF seems to be a useful modality in the armamentarium of chronic ulcer.

However, larger case control studies are required to reinforce its therapeutic efficacy.

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