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# PRF in Oral Surgery: A Literature Review

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#### **Abstract**

The research of adjuvant surgical to promote the healing is a challenge. A lot of processes were done especially the PRF (platelet rich fbrin ) that owes its action to its slow polymerisation which permits to pick up the growth factors inside the fbrin mesh. These factors and due to a slow release, permit a local stimulation of the healing time as well. Nowdays, with the use of the PRF, the oral surgery undergoes a lot of controversies. The clinical observations are in advance in regard to the scientific evidence. In spite of the encouraging results, research are to be deepen to get a complet scientific validity.

### Introduction

e oral surgery is confronted to a diversignment of interventions

#### What is PRF?

Platelet-rich brin (PRF) described by Choukroun et al. [1] is a second-generation platelet concentrate which contains platelets and growth factors in the form of brin membranes prepared from the patient's own blood free of any anticoagulant or other arti cial (Figures 1 and 2) [1]. Once seperated from the clot, the PRF may be withdrawed. is layer can be compressed into a membrane or shaped into a plug depending on what treatment is needed [1].

## **PRF** and Periodontal Regeneration

e aim of periodontal therapy is to arrest and control the periodontal infection and to regenerate all tissues of the periodontium (periodontal ligament, bone, cementum, and connective tissue) [11]. Currently, the local application of growth factors, has been investigated for use in the promotion h77.1 ((o)11d(n h)-1.233 Td[(p)-9 5 (io)e)5 (r)-8 (a) 5 be an e ective modality of regenerative treatment for periodontal intrabony defects [16]. orat had compared the clinical and radiological e ectiveness of autologous PRF gel in the treatment of intra-bony defects of chronic periodontitis patients with conventional periodontal ap surgery alone [12]. He showed a signi cant reduction in probing depth and clinical attachment level gain both groups (test and control group) when compared with baseline and 9 months. However, there was more probing depth reduction (4.56  $\pm$  0.37) and gain of clinical attachment (3.69  $\pm$  0.44) in the PRF treated group. e percentage of intra bony defect ll in the PRF group (46.92%) was higher than the conventionally treated subjects (28.66%); suggesting that the various growth factors present in the PRF may enhance regeneration [13]. Also, Panda showed that the use of PRF can be e ective as a sole regenerative material, in combination with open ap debridement [15]. Lekovic et al. [13] evaluated the e ectiveness of PRF membrane in promoting clinical signs of periodontal regeneration in human intra-bony defects.

ey suggest that treatment of intra-bony defects with PRF results in signi cant improvements of pocket depth, clinical attachment level and defect compared with conventionally treatment [13]. Pradeep concluded that PRF and PRP were superior in the treatment of intra

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