



## Soft tissue response to Platelet Rich Fibrin: clinical evidences

### ABSTRACT

The correct management of the extraction site is mandatory for aesthetic reasons and in order to avoid bone resorption following extraction. Often, it is necessary to graft a filler material into the extraction site to maintain the residual bone volume. However, the management of soft tissue over the graft could require flap traction and discharging incisions, which reduce microvascularisation at the margins. In this article, the Author analyzed the characteristics of PRF, investigating the possibility to use it in combination with filling materials, with the advantage of an effective support for the cellular migration and revascularisation of the grafted site. Actually, it has been suggested to use PRF as a guided tissue regeneration membrane, to cover and protect the bone graft material (Gen-Os, OsteoBiol®, TecnoSS®, Coazze, Italy) and the operative site. The application of a PRF membrane allows the surgical site to be protected from external contaminations and offer a matrix for faster healing of the wound edges. As suggested by the Author, the use of a PRF membrane in the treatment of infrabony defects could be an advantage for an excellent healing. Mixed with graft materials, PRF is able to attract mesenchymal cells and new blood vessels, accelerating the healing times.

### CONCLUSIONS

The use of PRF is a valid support in guided tissue regeneration because of its potential for accelerating the processes of tissue healing and this makes the treated site less sensitive to outside contaminations and positively influences the aesthetic result and the patient's postoperative comfort. At deeper levels, PRF increases the cohesion between the grafted biomaterial particles and facilitates the diffusion of growth factors locally at the graft site.

The Author underlines that *"the high concentration of plasmatic cytokines and fibrin exert an osteogenic effect on bone progenitor cells and the concentration of leukocytes contained in the PRF appears to guarantee an immune action that facilitates the success of large grafts"*.

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