USE OF PRF IN MANDIBULAR BONE REGENERATION FROM LESION AFTER HERPES ZOSTER VIRUS MANIFESTATION IN A PATIENT WITH LUPUS - CLINICAL CASE

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INTRODUCTION

Platelet-rich fibrin (PRF) is a platelet concentrate originated from blood centrifugation performed with time and specific gravitational force. This type of concentrate has been used in the areas of Dentistry, Medicine and Veterinary Medicine as a potentially viable regenerative therapy due to the growth factors found in platelets.

METHODS & MATERIAL

To achieve the complete treatment of the clinical case, three distinct steps were carried out:

First stage: bone treatment of necrotic lesions, followed by follow-up.
Second stage: surgical rehabilitation with dental implants.
Third stage: prosthetic rehabilitation on implants.

CLINICAL CASE

A patient, female, 32 years old, with sistemic Lupus was affected by the herpes zoster vírus reaching the mandibular and lingual nerve.

Clinically, the patient showed signs of necrotic lesions in the left mental region, as well as paresthesia.

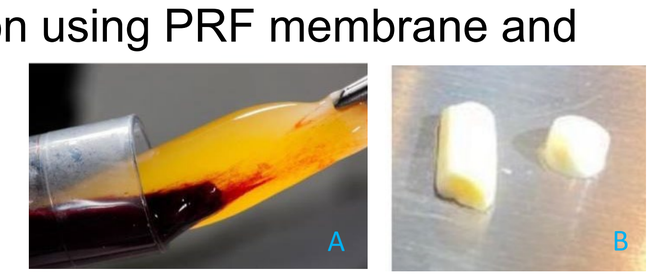
(Pic. 01 – patient with active Herpes Zoster lesion on the face, left side)

Fifteen days after the onset of herpes zoster virus, the alveolar bone tissue of the teeth innervated by the left mental nerve began the process of necrosis, and the adjacent teeth were subsequently exfoliated.

(Pic. 02 - gingival ischemia and start of teeth loses)

(Pic. 03 - Teeth loss caused by a decrease of the vascularization and bone necrosis of the alveolar region)

Were realized osteoplasty two times using alveolotome and bone file associated with L-PRF irrigation, grafting of calcium-activated PRF gel, and covering of bone lesion using PRF membrane and suture for the treatment of bone injury.



(Pic. 04 – A: L-PRF membrane B: calcium activated PRF gel)

After a period of approximately 12 months, a decrease in left mandibular paresthesia was observed, as well as tissue revascularization and bone healing. Therefore, a tomography was requested to evaluate the possibility of rehabilitation with dental implants.

(Pic. 05 - Tomography pre opperative)

Prosthetic surgical rehabilitation allowed excellent aesthetic and functional results, and knowledge of the operative technique and restorative materials were of fundamental importance for the planning and execution of rehabilitation.

Therefore, the clinical case presented was successful and patient satisfaction at the end of treatment was very good.

(Pic. 06 - Planning pre opperative and prhostetic rehabilitation on dental implants)

CONCLUSION

The treatment performed with the use of PRF in this case was a strategy for tissue healing considered a viable option, of simple execution, of low cost, and with beneficial properties for an improvement of the regenerative capacity, even in an area compromised with bone necrosis. However, no other case report was found that had used PRF to treat bone necrosis caused by the Herpes Zoster virus associated with Systemic Lupus. Therefore, further studies are needed to confirm this technique as a safe treatment in similar cases.

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