Management of inflammatory radicular cyst and dental roots resection using PRF.

Platelet-rich fibrin (L-PRF) is an autogenous matrix derived from the concentration of the patient’s blood platelets. A simplified chairside procedure results in the production of a fibrin membrane that is capable of stimulating the release of many important growth factors involved during wound healing processes that take place after surgery. It can be used for regeneration of soft and bone tissue.

24 year old patient came to the Department of Oral Surgery, because of pain in the 31-33 region. Radiographic examination revealed radicular cyst encompassing 31 and 32 roots. CBCT scan showed buccal bone loss and let precisely establish treatment plan, followed by the root canal treatment of 31 and 32 recommended to the patient. Blood samples were taken and processed in PRF centrifuge. Mucoperiosteal flap was mobilized in the 31-33 region in the buccal side under local anesthesia. The radicular inflammatory cyst was removed following 31 and 32 root resection. Bony defect was augmented with allogenic bone block from Poland Tissue Bank. It was then covered with 2 PRF membranes. The wound was sutured. Antibiotic and painkillers were prescribed and referred to the patient. Uneventful healing was observed during follow up visits. CBCT scan after 4 months showed bone remodeling in the surgical site.