



Use of PRF to facilitate wound healing after oral surgical interventions in patients with risk of bisphosphonate-related osteonecrosis of the jaws

Ass. Prof. Biljana Evrosimovska*

Ass. Prof. Nikolovski Bruno, Dr. spec. Gigovska-Arsova Ana***, Ass. Prof. Trpevska Vesna**,**

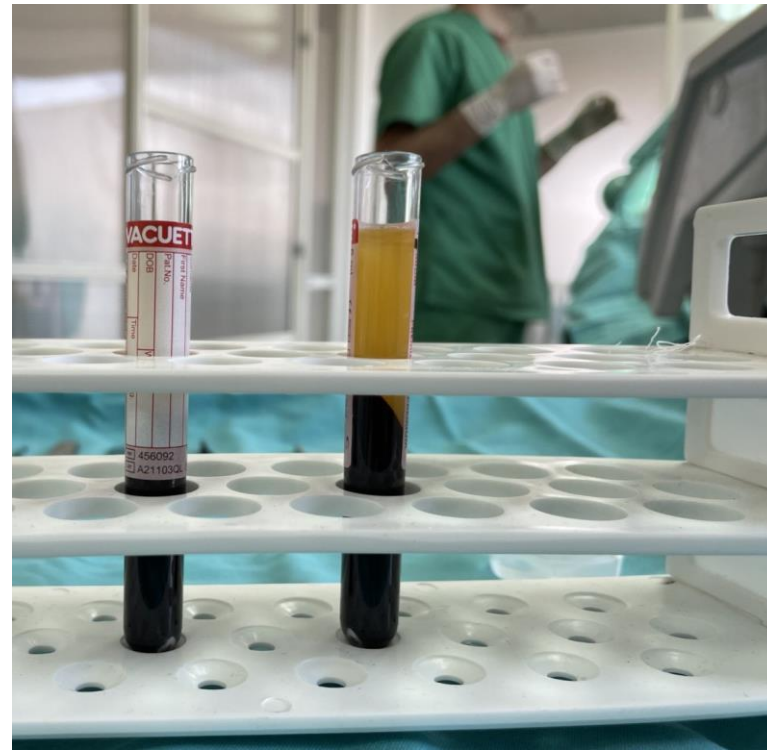
Ass. Prof. Jurukovska-Sotarovska Vesna*

***University "St Cyril and Methodius", Faculty of Dental Medicine, Department for Oral surgery, Department for Prosthodontic, Skopje, Macedonia**

*****University "Goce Delcev", Faculty for Medical Sciences, Dental Medicine, Stip, Macedonia**

*****University Dental Clinical Centre "St Pantelejmon", Department for Oral surgery and Implantology, Skopje, Macedonia**



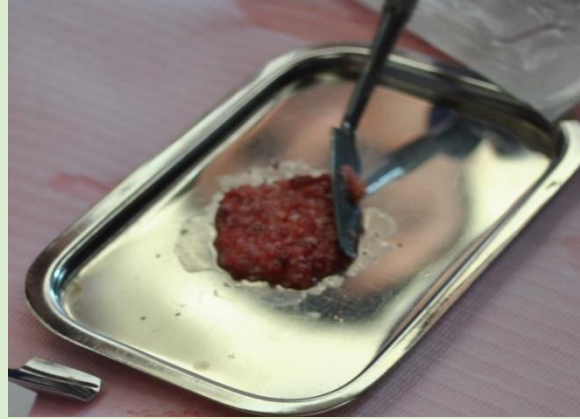
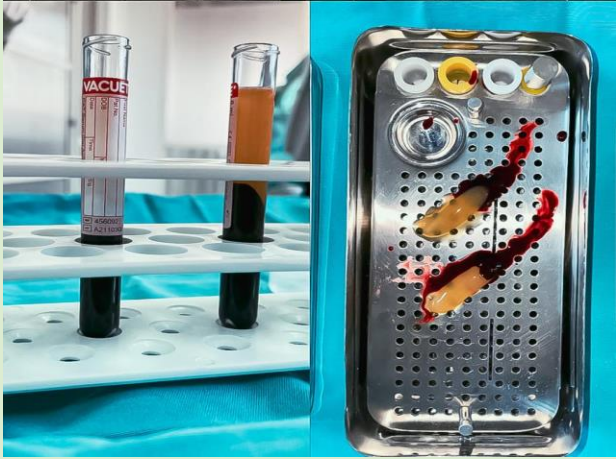


Furthermore, in the extraction wound we applied several PRF plaques, which we obtained from venous blood taken from the patient herself before the start of the intervention.

Venous blood is taken in a 10 mL test tube without the presence of anticoagulant and immediately centrifuged at 1300 rpm for 14 minutes. In this way, a fibrin plug is formed in the middle of the test tube, between the red blood cells that are exposed at the bottom of the test tube and the acelluar plasma on the surface.

We removed the fibrin plug thus formed from the test tube and with the help of the piston from the PRF box we formed the PRF plaque.





Our choice for the application of PRF sheets was based on the benefits that PRF itself possesses: anti-inflammatory, anti-edematous and regenerative effects. Namely, PRF is an addition to the natural wound healing process and has the following effects:

- 1) The fibrin network is involved in cell migration, mainly of endothelial cells necessary for neoangiogenesis and vascularization;
- 1))The healing process is further aided by the continuous release of various growth factors (PDGF, TGF- β , IGF-1;)
- 2) The presence of leukocytes and various cytokines enables self-regulation of infectious and inflammatory processes.

