ABSTRACT

The aim of the study is to evaluate and compare the bone regeneration potential of Autologous Platelet Rich Fibrin placed in one of the extracted socket after the surgical removal of bilateral impacted mandibular third molars.

MATERIALS AND METHODS:

Twenty five patients (10 female, 15 male; 18 to 35 years old) were taken for surgical removal of bilateral impacted mandibular third molar, performed in the same session. The Autologous Platelet Rich Fibrin was placed in one of the extracted socket whereas the opposite side was taken as control side and primary closure was done. Radiographic examination with Orthopantomogram was done preoperatively and 1 month, 3 months and 6 months postoperatively to assess the degree of bone regeneration at the extracted site and compare it with the control side using Matlab software and the data is statistically analyzed using paired t test.

RESULTS:

A significant bone formation was observed in the PRF side when compared with the control side as indicated by the P values of (p=0.06>5%) 1 month, (p=0.00<1%) 3 month, and (p=0.00<1%) 6 month postoperatively. The Repeated Measure ANOVA showed a significant difference seen on 1st, 3rd, and 6th month postoperatively on PRF side (p=0.001).

CONCLUSION:

The Autologous Platelet Rich Fibrin improves and fastens the bone regeneration and healing in the extracted sockets.
KEYWORDS: Platelet Rich Fibrin, bone regeneration, bilateral impacted third molar, Orthopantomogram, Matlab software, Paired t test.