

21ST ANNUAL WORLD DENTAL SUMMIT

February 26-28, 2018 | Paris, France

Ridge preservation using collagen cone for implant site development: Clinical, radiographical and histological study

Alshaimaa Ahmed, Maggie Ahmed Khairy and Inass Abou Elmagd
Fayoum University, Egypt

Objective: The aim of the study was to evaluate the clinical and histological outcomes of extraction socket grafted with collagen cone in comparison to extraction site that healed naturally for implant site development.

Patients & Methods: 26 healthy patients require extraction of a single rooted tooth participated in this study. They had been divided into 2 groups. In Group-1 (control), the extraction socket was left with no graft to heal with secondary intention. While in group-2 (study), the socket was filled with collagen cone. Implants were inserted in average of 3 months after socket grafting. Cone Beam CT (CBCT) images were done prior to implant insertion to assess height and width of the ridge as well as bone density. Core biopsies were taken during implant placement. While implant stability test (ISQ) were done right after the implant was placed.

Result: The vertical bone changes at the grafted sockets were significantly lower ($p < 0.0001$) when compared to non-grafted sockets. Moreover, the width reduction of the grafted sites was significantly lower ($p < 0.0001$) than the non-grafted group. No significant difference was detected in RFA between two groups. Values of bone density were higher in the grafted sites.

Conclusion: The alveolar preservation with collagen cone is an effective way to maintain the ridge dimensions after tooth extractions.

alshaimaahmed@hotmail.com

Notes: