

# USE OF COLLAGEN MATRIX TO CHANGE GINGIVAL BIO-TYPE OVER APICECTOMY; CASE REPORT



**Bone Institute**

Email: [dai@boneinstitute.info](mailto:dai@boneinstitute.info)

## AUTHOR:

Atef Ismail Mohamed  
BDS, HDD, MSD, NLPD,  
Bone Institute, Cairo - Egypt

### OBJECTIVE

- \* Change in keratinized mucosa due to fistula associated with periapical granuloma may alter the outcome of apicectomy procedure.
- \* Aim of this study is to evaluate the possibility of use of collagen matrix (Derma® Osteobiol) to change biotype over apicectomy.

### METHODS

- \* 32 years female patient with periapical lesion related to upper left lateral incisor exhibiting fistula in the buccal surface.
- \* Quality of keratinized mucosa assist photography and clinical using endodontic file.
- \* Surgical removal of periapical lesion was performed according to the surgical protocol after endodontic treatment for the affected tooth.
- \* Bony defects were augmented using bone substitute.
- \* Fistula was surgically removed.

- \* Collagen matrix is fashioned to cover the defect size and surrounding area.
- \* Flap suturing and antibiotic regime for 10 days.
- \* Clinical, photographic and radiographic evaluation follow-up extended for one year.

### RESULTS

- \* Complete closure of fistula and thickened keratinized mucosa were observed demonstrating a change of biotype from thin biotype to a thick one maintained through one year follow-up.
- \* Radiographic evaluation reveals successful apicectomy procedure.

### CONCLUSION

- \* This clinical report reveals possible change of biotype by using collagen matrix over apicectomy site.
- \* This provides secured media for successful apicectomy procedure.



PRE OPERATIVE



SURGICAL INCISION



FISTULA REMOVAL



GRANULOMA REMOVAL



PUTTY APPLICATION



DERMA APPLICATION



FINAL RESULT



ONE YEAR POST OPERATIVE