CHAPTER VI

CONCLUSIONS

This study monitored CS (WF6 epitope) levels in human GCF and PMICF around teeth undergoing orthodontic molar intrusion and around miniscrew implants. Monoclonal antibody WF6 and the ELISA method were used to quantify the CS levels. Ten patients with open skeletal open configuration were included in this present study.

1. CS (WF6 epitope) was detected in gingival crevicular fluid around experimental molars, control molars and miniscrew implants during the unloaded period (2 weeks) and the loaded period (12 weeks).

2. Around experimental molars, median of CS (WF6 epitope) levels in gingival crevicular fluid during the loaded period (12 weeks) (2.1 ng/µg of total protein content) were significantly greater than those during the unloaded period (2 weeks) (0.832 ng/ µg of total protein content)

3. Around experimental molars, median of CS (WF6 epitope) levels during each two-week interval of the loaded period (12 weeks) were significant greater than those during the unloaded period (2 weeks).

4. Around control molars (right mandibular first molars and right maxillary second molars), median of CS (WF6 epitope) levels in gingival crevicular fluid during the loaded period (12 weeks) (1.252 and 1.58 ng/ µg of total protein content

respectively) and those during the unloaded period (2 weeks) (1.413 and 1.884 ng/ µg of total protein content respectively) were not significantly different.

5. Around miniscrew implants, median of CS (WF6 epitope) levels in peri-miniscrew implant crevicular fluid during the loaded period (12 weeks) (0.408 ng/ µg of total protein content) and those during the unloaded period (2 weeks) (1.827 ng/ µg of total protein content) were not significantly different.