

A-6. Relationship between the Thickness of Palatal Masticatory Mucosa and the Shape of Palatal Vault and Tooth

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The aim of present investigation was to clinically measure the thickness of palatal masticatory mucosa in the hard palate as potential donor site of mucogingival surgery to determine the relation to shape of palatal vault, form of tooth, gender and to serve the clinical criteria to choose the proper surgical technique. 84(average age 25yrs) systemically and periodontally healthy volunteers participated in this study and 18 standard measurement points were defined in the hard palate, located on 3 lines which ran at different distances parallel to the gingival margin. 6 positions were designated on each of these 3 lines between the level of canine and 2nd molar and a bone sounding technique using a periodontal probe with minimal anesthesia was utilized to assess the thickness of palatal masticatory mucosa.

Student t-test was used to determine the difference in mucosal thickness between 2 groups' gender, shape of palatal vault (high palatal vault vs. low palatal vault), tooth form (short-wide vs. long narrow)

The result of this study were as follows:

1. Soft tissue thickness progressively increased in sites further away from the gingival margin ($p < 0.01$)
2. Depend on position, in line a and line c the masticatory mucosal thickness increased from Ca to M2($p < 0.01$), but in line b the thickness increased from Ca to P2, and decreased to M1 and increased again to M2
3. Gender did not influence the thickness of masticatory mucosa
4. Palatal vault shape was associated with the thickness of masticatory mucosa. Thickness of low palatal vault group was thicker than high palatal group between P2 and M2 position
5. Form of tooth did not influence the thickness of masticatory mucosa

In conclusion, palatal vault shape was associated with the thickness of masticatory mucosa. So, mucogingival surgery can be considered as a treatment modality in high palatal vault group. But, Gender and tooth form did not influence the thickness of masticatory mucosa.