

OP02 MEAN GINGIVAL THICKNESS OF THE MAXILLARY AND MANDIBULAR ANTERIOR REGION IN INDIVIDUALS WITH DIFFERENT CRANIOFACIAL MORPHOLOGY

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AIM: To evaluate the mean gingival thickness of the maxillary and mandibular anterior region in individuals with different craniofacial morphology.

SUBJECTS AND METHOD: For each dental arch 128 periodontally healthy orthodontic patients with normal values of upper incisor position (1/NA angle and mm, IMPA angle) and lower incisor position (1/NB angle and mm, 1/SN angle) were enrolled in the study. The craniofacial morphology of the participants was evaluated in the sagittal (ANB angle) and vertical directions (SN/GoGn angle) on lateral cephalograms taken at the beginning of treatment. In the sagittal direction the individuals were divided into three groups as Class I, II and III. Each group was classified as low, normal and high angle in the vertical direction. The mean gingival thickness of maxillary and mandibular anterior region was determined by the ratio of the sum of the gingival thickness of the relevant teeth, measured by the transgingival probing technique, to the number of the teeth. Factorial variance analysis was employed in order to identify the extent to which a difference was apparent according to these parameters.

RESULTS: The ANB angle of the Class I, II and III groups was 2.591 ± 0.918 , 6.05 ± 1.277 and -0.844 ± 1.441 , respectively, and the SN/GoGn angle of low, normal and high angle groups was 25.258 ± 1.57 , 32.702 ± 1.99 and 39.802 ± 3.187 , respectively. The mean gingival thickness of the maxillary anterior region was 1.173 ± 0.61 mm, 1.103 ± 0.207 mm and 1.130 ± 0.244 mm in the Class I, II and III groups, respectively, and 1.084 ± 0.150 mm, 1.136 ± 0.247 mm and 1.159 ± 0.249 mm in the low, normal and high angle groups, respectively. The mean gingival thickness of the mandibular anterior region was 0.710 ± 0.156 mm, 0.741 ± 0.176 mm and 0.691 ± 0.157 mm in the Class I, II and III groups, respectively, and 0.705 ± 0.184 mm, 0.701 ± 0.132 mm and 0.735 ± 0.174 mm in the low, normal and high angle groups, respectively.

CONCLUSIONS: There was no significant difference between groups in terms of the mean gingival thickness of the maxillary and mandibular anterior region in individuals with different craniofacial morphologies.