THE CORRELATION BETWEEN THE VERTICAL DIMENSION OF OCCLUSION AND CERTAIN ANTHROPOMETRIC MEASUREMENTS ON A PATIENT'S FACE

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Introduction: Properly determining the vertical dimension of the occlusion is a very important part in correctly determining relationships between maxilla and mandible. The vertical dimension is clinically defined as the position of physiological rest, minus the size of the interoclusal space. The parameters considered are: bipupillary line, maximal intercuspation and maximal opening. The bipupillary line represents an imaginary horizontal line connecting the centers of both pupils. Maximal intercuspation represents the position of the lower jaw relative to the upper jaw, which is determined by the maximum contact surface of the antagonist tooth. Maximum opening is the distance between tip of the nose and gnation at maximum mouth opening.

The Aim: The aim of this study was to determine the correlation between certain facial relationships of the subjects with a preserved dental arch in order to use the results for determining the relationships between maxilla and mandible of toothless patients.

Material and Methods: 40 subjects participated in the research, of whom 28 were female, and 12 were male. The measurements were taken at the dentistry clinic, in the preclinical room. Via a ruler, we measured the following parameters on the subjects' faces: the bipupilar line (BL), maximum intercuspation (MI) and maximum mouth opening (MMO).

Results: The subjects' age is balanced among the genders($p=0.0256$). According to the statistics, the values of BL, MI and MMO are considerably greater for the female subjects than for the male ones ($p=0.023$, $p=0.018$ and $p=0.002$). There is a statistically significant correlation between the following parameters: BL and MI ($r=0.411$, $p=0.008$), BL and MMO ($p=0.546$, $p>0.001$), MI and MMO ($r=0.707$, $p=0.001$).

Conclusion: The results of this study show that the correlation between MI and MO is statistically the most significant one.