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ORIGINAL ARTICLE

**THE EFFECT OF MISSING POSTERIOR TEETH ON THE VERTICAL DIMENSION OF
OCCLUSION (CEPHALOMETRIC STUDY)**

Abstract

Background: Neuromuscular harmony could be maintained and a well-established anterior incisal edge position could preserve the vertical dimension. Aim of the study: improve the proper relationship of anterior teeth with the lips, and stable TMJ would maintain the accurate comfort range of vertical dimension. **Material and method:** cephalometric radiographs were taken to two groups the first group was composed of 20 volunteers (10 male, 10 female) who were considered the control group the criteria for this group were as follows: The age range was from 30 to 50 years. All subjects were chosen based on a Class I dental relationship, with normal TMJ showing no obvious discrepancies. The other group was composed of 20 subjects (10 male, 10 female) which was the study group who had posterior teeth missing while maintaining anterior teeth stopper to investigate the effect of losing posterior teeth upon the comfort scale of vertical dimension of occlusion forward and backward, upper and lower face heights were measured as indicator of vertical facial relationships. **Results:** An independent t-test among the groups indicated that the difference in the vertical dimension of occlusion was non-significant statistically at about $p>0.05$ before and after the loss of posterior teeth. **Conclusions:** The VDO is established when the eruptive force is terminated by the recurrent position of the mandible to the maxilla. The vertical dimension of occlusion could be preserved by the anterior guidance and correct centric position of the condyle