

12. Craniofacial morphological parameters as indicators of occlusal vertical dimension - a cephalometric study

Komal Sehgal

HSJ Institute of Dental Sciences.

Establishing and evaluating occlusal vertical dimension (ovd) is crucial for the functional and physiognomic rehabilitation of patients with removable, fixed or implant supported prosthesis. As evident from the review of literature, no single method proposed till date is considered to be absolutely precise and reliable, and the final decision regarding vertical dimension is empirical, mostly subjective, based more on clinical judgement. Failure to reconstruct an optimum ovd may adversely affect the harmony of the entire stomatognathic system and is manifested as compromised functions, poor esthetics and difficulty in adaptation by patients. Taking into consideration the significance of vertical jaw relations and the current understanding about the mechanism of development of ovd, our study aimed at establishing skeletal parameters that can be used as objective guidelines for determining ovd based on the morphology of cranium and jaw elements. The cephalometric radiographs of 100 dentate individuals, with maintained ovd, were utilized to analyse the correlations of ovd with certain angular and linear parameters, which do not change with the posture of mandible and the presence or absence of teeth. Using the significant correlations, formulae were derived for the estimation of ovd. Based on the results of this study, ovd specific to a patient can be estimated using the individual's craniofacial morphologic indicators.

DOI: 10.4103/0972-4052.246568