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The morphologic structure of the openbite in adult Taiwanese

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ABSTRACT

Anterior openbite (AOB) is an intricate occlusal problem. Treatment of AOB is one of the most challenging tasks in orthodontics. An ethnic-specific norm for craniofacial skeletal patterns would be valuable in diagnosing and treating patients with AOB. To establish this norm for the people of Taiwan, a cephalometric study was conducted using the quadrilateral analysis developed by DiPaolo. The sample consisted of 15 males and 25 females in their 20s and 30s. The patients were randomly selected and were diagnosed with AOB. Various craniofacial skeletal patterns were measured, and these measurements were compared with values taken from a group of normal Taiwanese as well as with published values from a hyperdivergent group of westerners. The results support the following generalizations: (1) The growth pattern of subjects in the AOB group is hyperdivergent. (2) Both the maxillary and mandibular corpora of subjects with AOB are shorter than those of normal subjects. (3) The sagittal angle, average lower facial height, and the maxillary and mandibular sagittal ratio of subjects with AOB are larger than those of normal subjects. Abnormalities in the maxillomandibular complex causing changes in the vertical dimension of facial patterns are involved in AOB.

KEY WORDS: Anterior openbite, Adult Taiwanese, Quadrilateral analysis.

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