

Relationship between alveolar bone dimensions and incisor inclination in skeletal Class III patients

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Abstract

Objective To investigate the relationship between alveolar bone dimensions and incisor inclination in skeletal Class III patients.

Materials and methods Selected samples from digital lateral cephalometric radiographs of 73 skeletal Class III patients from Department of Orthodontics, Faculty of Dentistry, Chulalongkorn University, aged more than 18 years, ANB less than 1°, overjet less than 0 mm, were examined. Hand on tracing to investigate relationships between the alveolar bone dimensions and incisor inclination that divided on maxilla and mandible as 3 variables. The Pearson correlation was used for statistical analysis (p value = 0.05).

Results In skeletal Class III patients, in the upper arch, there was no statistical significance between upper incisor inclination and Maxillary alveolar and basal height (MxABH) and between upper incisor inclination and Maxillary anterior depth (MxAD) as well as in the lower arch that there was no statistical significance between lower incisor inclination and Mandibular alveolar and basal height (MdABH) and between lower incisor inclination and Mandibular alveolar depth (MdAD) (p value = 0.05).

Conclusion There is no correlation between alveolar bone dimensions and incisor inclination in skeletal Class III patients.

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Key words: alveolar bone dimensions; incisor inclination; overjet; skeletal Class III

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