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KEY WORDS : DENTOALVEOLAR HEIGHTS / FACIAL HEIGHTS /
VERTICAL SKELETAL DISCREPANCIES

ARAYA WISETSANTIKUN : DENTOALVEOLAR HEIGHTS AND
FACIAL HEIGHTS IN DIFFERENT VERTICAL SKELETAL PATTERNS. THESIS
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This study was conducted to investigate the differences of the dentoalveolar heights and the facial heights among skeletal open bite (class I , II and III) , skeletal normal bite (class I , II and III) and skeletal deep bite (class I , II and III) , the sexual dimorphism and the relationship between dentoalveolar heights and facial heights , within the dentoalveolar heights , within the facial heights , between the dentoalveolar heights and the variables in the facial polygon as well as between the facial heights and the variables of the facial polygon .

Five hundred and forty pretreatment lateral cephalograms were classified into three vertical skeletal groups by PP-MP angle then each vertical group was divided into three sagittal skeletal groups by ANB angle and WITS appraisal . There were 30 male and 30 female subjects in each group. The findings were found as the following :

1).The linear measurements of the dentoalveolar heights and the facial heights in males were significantly greater than in females in all skeletal groups . However the dentoalveolar heights and the facial height ratios showed no sexual difference.

2).The dentoalveolar heights and the facial heights were significantly different among the three vertical groups except the LPDH and the UAFH.

In skeletal open bite class II , the LADH was significantly larger than in skeletal open bite class I and III. In skeletal open bite class III , the UADH was significantly smaller and the LAFH , TAFH , UPFH and TPFH were significantly larger than in skeletal open bite class I , II.

In skeletal normal bite class III , the UADH was significantly smaller and the LAFH and UPFH were significantly larger than in skeletal normal bite class I and II.

In skeletal deep bite class III , only the UADH was significantly smaller than in skeletal deep bite class I and II.

3).There were significant correlations between all the dentoalveolar heights and the LAFH , TAFH.

4).The anterior dentoalveolar heights were correlated with the posterior dentoalveolar heights in each upper and lower arch.

5).The UAFH and LAFH were correlated with the TAFH and also the same correlation pattern in the posterior facial heights .

6).All the facial heights were correlated with the adjacent variables of the facial polygon .

The skeletal dysplasia was the result from the variety in the size , shape and proportion of the various regions of the craniofacial complex.