ABSTRACT

AIMS : To determine the correlation between the area of frontal sinus and maxillary sinus with other craniofacial patterns

MATERIALS AND METHODS: The total of 96 subjects were collected from the patients who came to the Department of Orthodontics and Dentofacial Orthopaedics for treatment of their malocclusion. Of all the patients those who were subjected to prescription of lateral cephalogram and those who satisfy the inclusion criteria were taken as subjects. Among those chosen subjects who already had their own radiograph were not exposed twice; rather the existing radiograph were used. The subjects lateral cephalograms were traced and divided into three groups based on their ANB angle and certains craniofacial patterns were assessed followed by evaluation of FSA and MSA by graphical method. Obtained craniofacial patterns were correlated with evaluated FSA and MSA values.

RESULTS: The results showed significant correlation of frontal sinus area with SNB of Class II which has the 'p' value of 0.037 and weak Pearson's correlation coefficient of 0.127. The correlation with Pearson's correlation coefficient showed significant correlation of maxillary sinus area with CO-A of Class II skeletal malocclusion which has the 'p' value of 0.044 and Pearson's correlation coefficient of 0.571.

CONCLUSION: It was concluded that certain parameters in Class II malocclusion seems to have a significant positive correlation with both frontal and maxillary sinus area which aids in assessment of Class II skeletal malocclusion whereas Class I and Class III doesn't show any significant correlation.