

CEPHALOMETRIC STUDY OF UPPER AND LOWER PHARYNGEAL AIRWAYS IN SKELETAL CLASS-I, CLASS-II & CLASS-III MALOCCLUSIONS HAVING VERTICAL & NORMAL OR HORIZONTAL GROWTH PATTERNS

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ABSTRACT

Aims

To compare the upper and lower pharyngeal airways.

Objectives

To study the Patients with skeletal Class I, Class II and Class III malocclusions and evaluate the co-relation between different growth patterns and pharyngeal airways.

Materials and Methods

The pre-treated lateral cephalograms that were considered in this study were obtained from those patients with skeletal Class I, Class II or Class III malocclusions, who were being treated at Sharad Pawar Dental College, Wardha, and whose existing records were available in the Department of Orthodontics. For the purpose of collection of the pre-treated cephalograms, the sample population in this study was segregated into 3 groups, with each group comprising of 30 individuals. The sample population of Group 1 comprised patients with Class I malocclusion, and on the basis of the growth pattern of the malocclusion, this group was further sectioned into Class I with vertical growth pattern and Class I with normal growth pattern. Similarly, the sample population of Group 2 comprised patients with Class II malocclusion, and the patients with Class III malocclusion, subsequent to the determination of their skeletal relation, were categorized as Group 3. The skeletal relation and the pattern of growth were ascertained in all the patients in the groups, and the upper and lower pharyngeal airways were evaluated using Mc Namara's airway analysis.

Results and Conclusion

Statistically significant outcome in the Class I, Class II and Class III malocclusions was achieved in the upper and lower pharyngeal airways between normal and vertical growth patterns. Nevertheless, on independently contrasting the Class I, Class II and Class III malocclusions and their patterns of growth, we observed no statistically significant difference. In addition, the results of these comparisons on considering the pharyngeal airway spaces generated statistically significant variations, except in the Class I versus Class II groups.

KEYWORDS: Pharyngeal Airway, Cephalogram, Growth Pattern