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Research Article

SCHWARTZ CEPHALOMETRIC ANALYSES FOR CLASS-1 PATIENTS IN CHENNAI POPULATION

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A R T I C L E I N F O

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A B S T R A C T

Aim: To compare the cephalometric analyses between 50 male and 50 female patients with class-1 occlusion in chennai population. And interpret the values collected.
Objective: To do Schwartz cephalometric analysis for class-1 (50 male & 50 female) patients attending department of orthodontics in saveetha dental college, chennai.
Background: Lateral cephalometric radiographs have become indispensable to orthodontic treatment of patients. They are important in orthodontic growth analysis, diagnosis, treatment planning, monitoring of treatment and evaluation of treatment outcome.In this study we use all Schwartz cephalometric analysis techniques to compare the findings between male and female patients.
Reason: Identification of landmarks and interpretation of findings of a three dimensional object on a two dimensional image cannot be regarded as truly stable. Correlation between linear and angular measurements as applied in Schwartz analysis can predict correct way of diagnosis and treatment planning.

INTRODUCTION

Class I malocclusion is characterized by a skeletal difference of the maxillary bases *vs* the basis of the skull, produced through maxillary protrusion and/or mandibular retrusion. The molar and canine sagital relation is distalized, evidencing according to the classification of Angle, two clinical entities-division 1, with proclination of the upper incisors and increased over jet, division 2, with retroclination of the upper incisors and minimum over jet[1]. Introduction of cephalometric radiography, in 1934, by Hofrath in Germany and by Broadbent, respectively, in the USA, permitted study of malocclusions by evidencing skeletal discrepancies[2]. Several authors made known the cephalometric analyses they had performed for the diagnosis of skeletal malocclusions, including various angular, linear and percentual measurements. The literature of the eld provides numerous cephalometric studies, developed comparatively on skeletal classes I and II, on sexes, age, clinical divisions, dentitions and different populations[3,5]. The results are debatable, if considering the size and selection criteria of the experimental groups, ethnic heterogeneity, races and diversity of the investigation methods applied[4,6,7]. In order to establish an accurate diagnosis and proper therapy planning in orthodontics, it is necessary to perform the analysis of transverse and sagittal dental arch development in relation to the facial type of the patient. The aim of this study was to determine sagittal and transverse parameters of dental arches in the population of RepublikaSrpska (Bosnia and Herzegovina) based on Schwarz analysis[8]. Objectives of cephalometricsis to visualize the contribution of skeletal and dental relationship to malocclusion. It is not to generate drawings and tables of numbers that are estimators of relationship.

Measurements and other analytical procedures are used to understand dental and skeletal relationship for each individual patient[9,10].

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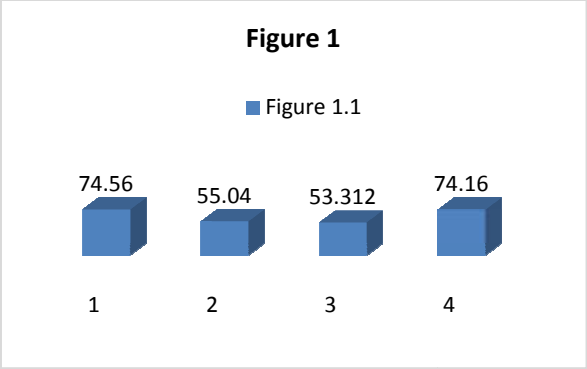
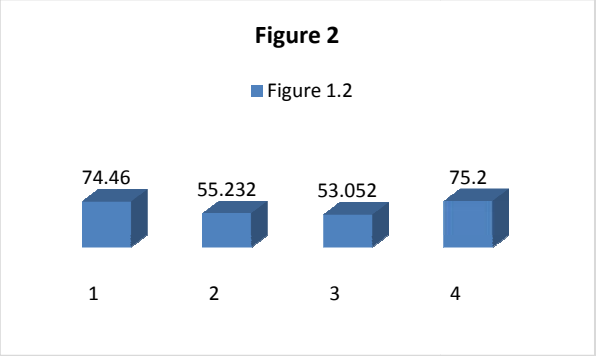
MATERIALS AND METHOD

The study population comprised of 50 subjects of which 25 were male and 25 were female. Lateral cephalometric radiographs were taken for all the subjects. Schwartz analysis was done and the data was tabulated. Mean values for the male and female population was compared and statistical significance was determined for the same.

RESULTS

The following table indicates theExtent of anterior cranial base (1), Extent of ascending Ramus (2), Extent of maxillary base (ANS-PNS) (3), Extent of mandibular base (Go-Mn) (4) in males (fig 1) and females (fig2).



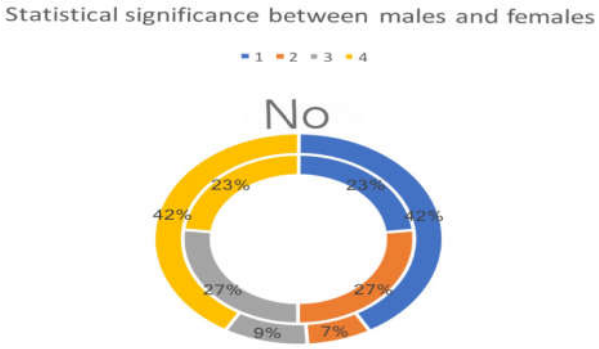


DISCUSSION

During the past three decades, research in the field of cephalometrics has contributed a vast amount of information about the growth and development of the human face. The development and application of cephalometry has provided not only those associated with research, but also the clinical orthodontist with data on normal and abnormal facial growth, general facial and skeletal types, the dynamics of function, and case analysis and treatment planning.

Most of this information has been obtained by using angular measurements to assess spatial relationships. Methods of as se assessment incorporating linear measurements (Wylie, 1947, and Bjihk, 1947) have been proposed; but, for one reason or another, have never become popular with the everyday practitioner. Most current cephalometric discussions are centered around the more popular angular methods, proposed by Downs (1948), Tweed (1946, 1953, 1954), and Steiner (1953), for evaluating skeletal and dental disharmonies.

The purpose of this study is to give a norms for linear measurements like Extent of anterior cranial base, Extent of ascending Ramus, Extent of maxillary base, Extent of mandibular base in South Indian population



CONCLUSION

In this study cephalometric analyses norms for Extent of anterior cranial base, Extent of ascending ramus, Extent of maxillary base, Extent of mandibular base in South Indian population were derived for both males and females. Statistics shows that there is no statistical significance between males and females in all four parameters.

Reference

1. Schwartz, A.M.: LehrgangderGebiregelungWein, Innsbruck, Urban u. Schwarzenberg, Vol I and II , 1956
2. Korkhaus, G.: Present orthodontic thought in Germany, *Am. J. Ortho*., 45:881-900, 1959.
3. Angle E. (1899), Classi cation of malocclusion. *Dental Cosmos*; 41: 248-264.
4. Sayin Ö., Turkkaraman H. (2005), Cephalometric evaluation of nongrowing females with skeletal and dental Class II, division 1 malocclusion. *Angle Orthod*; 75: 656–660.
5. Hassan AH. (2011), Cephalometric characteristics of Class II division 1 malocclusion in a Saudi population living in the western region. *Saudi Dental J*; 23: 23–27.
6. Rosenblum RE. (1995), Class II malocclusion: mandibularretrusion or maxillary protrusion? *Angle Orthod*; 65: 49–62.
7. Saltaji H., Flores-Mir C., Major PW., Youssef M. (2012), The relationship between vertical facial morpho- logy and overjet in untreated class II subjects. *Angle Orthod*; 82: 432-440.
8. University of Banja Luka, Faculty of Medicine, Study Program Dentistry, Department of Orthodontics, Banja Luka, RepublikaSrpska, Bosnia and Herzegovina.
9. Proffit WR, Fields HW, Sarver DM. Contemporary Orthodontics. 4th ed. St. Louis, Missouri, USA: Mosby Elsevier; 2007.
10. Graber TM, Vanarsdall RL, Vig KWL. Orthodontics Current Principles and Techniques. 4th ed. Philadelphia, USA: Elsevier Inc.; 2005.

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