Assessment of the relationship between the morphology of symphysis and different skeletal classes in Iraqi sample aged (18-25) years

A Thesis

Submitted to the College of Dentistry University of Baghdad In Partial Fulfillment of the Requirements for the Degree

of Master of Science in Orthodontic Dentistry

By Ammar Sh. Ahmed B.D.S.

Supervised by Prof. Dr. Ausama A. Al. Mulla B.D.S., Dr. D.Sc. (Ortho.) France

June 2007

Jamadi Al-akhra 1428

Abstract

The present study was designed to evaluate the morphology of the symphysis in subject with different sagittal skeletal pattern.

The material comprised of 176 computerized lateral cephalometric radiograph of pre-treated orthodontic subjects (88 males and 88 females) aged 18-25 years.

The subjects where divided into: skeletal class I, II and III groups according to ANB angle, class I group consist of 33 males and 34 females, class II group consist of 33 males and 34 females, class III group consist of 22 males and 20 females. Four symphyseal measurement where used to represent the symphyseal morphology, Sixteen angular and linear measurement where used to asses skeletal features for each group.

- The result showed that symphysis height and ratio where differ significantly between the three skeletal groups, they where find to be higher in class II group and smallest in class I groups.
- Symphyseal height and depth and ratio in males were higher than females, While symphyseal angle was higher in females than males.
- There was strong positive association between Symphyseal height and maxillary length.
- 1/Mand angle was positively associated with Symphyseal depth.