

A thesis
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Abstract

One of the primary reasons for patient's to seek orthodontic treatment is esthetic or cosmetic reasons.

The purpose of this study is to evaluate facial asymmetry which present in essentially all normal individuals and result from a small size difference between the two sides, evaluate the correlation between maxillary and mandibular dental midlines with facial midline and to determine if there is gender differences in Iraqi adults.

The sample consist of 108 Iraqi adults (63 females, 45 males) aged 18-25 years with class I pattern. Clinical examination and digital photograph with cheek retractor were performed for each individual. The facial midline was determined by the perpendicular bisecting of interpupillary distance. Three linear soft tissue measurements to evaluate facial asymmetry and two linear measurements to evaluate the correlation between facial and dental midlines were measured for each photograph using AutoCAD program 2007.

A correlation analysis was performed to determine the correlation between facial and dental midlines. The following results were obtained:

- 1-The left side of the face is wider than the right side in 63.8% of sample, 0% equal sides and 36.1% wider right side.
- 2-Chin shifts to the left in 43.5% of the whole sample, 20.3% coincide with Fml and 37% shift to the right.
- 3-There is no significant relationship between facial and dental midline (maxillary and mandibular).
- 5-There is direct relationship between maxillary and mandibular dental midline.
- 6-There was no gender differences in both facial and dental asymmetry.