

[\[Print Version\]](#)

[\[PubMed Citation\]](#) [\[Related Articles in PubMed\]](#)

The Angle Orthodontist: Vol. 64, No. 6, pp. 425–436.

Posttreatment changes in different facial types

Abbas R. Zaher, BChD, MS, PhD; Samir E. Bishara, BDS, D Ortho, DDS, MS;^a Jane R. Jakobsen, BA, MS

^aProfessor, Department of Orthodontics, 220 Dental Science Bldg. S., Iowa City, Iowa 52242-1001

ABSTRACT

The purpose of this study was to describe and compare the changes occurring during and after orthodontic treatment in three facial types: short, average and long.

Sixty-six subjects with Class II, Division 1 malocclusion were evaluated. All cases were treated nonextraction, using a fixed edgewise appliance and extraoral forces. The lateral cephalogram and dental casts for each patient were measured at three different stages: pretreatment, immediately after appliance removal and at least two years posttreatment.

There was a wide range of individual variation in posttreatment change for the various skeletal and dental parameters measured. With few exceptions, the three facial types did not show significant differences in posttreatment change. The relative protrusion of maxillary incisor tip (U1:A-Pog) tended to increase after treatment in the long face type while it tended to decrease in the short face type. Long face females, when compared with all other groups, showed greater posttreatment incremental increase in anterior face height as well as the greatest posttreatment decrease in maxillary arch length. Males expressed greater posttreatment incremental increases in the various linear measurements of face height than females.

Differences in posttreatment change for the different facial types do not require special retention consideration.

A.R. Zaher, Associate Professor, Department of Orthodontics, Faculty of Dentistry, Alexandria University, Alexandria, Egypt

S.E. Bishara, Professor of Orthodontics, College of Dentistry, University of Iowa, Iowa City, Iowa

J.R. Jakobsen, Assistant Professor, Department of Preventive and Community Dentistry, University of Iowa, Iowa City, Iowa

KEY WORDS: Face type, Cephalometrics, Dental arch, Posttreatment changes.