AGING PROCESS IN NORMAL OCCLUSION INDIVIDUALS: FACIAL ATTRACTIVENESS PERCEPTION AND ANTEROSUPERIOR DENTAL CHANGES

Introduction: The aim of this study was to evaluate the influence of aging on facial attractiveness perception and the maxillary anterior teeth changes in nontreated acceptable occlusion subjects from 13 to 61 years of age. Methods: Facial photographs and digital casts of 24 nontreated acceptable occlusion subjects were used. Frontal and profile facial photographs taken at 13 (T1) and 61 years of age (T2) were used for the facial attractiveness evaluation. Groups of 30 orthodontists and 30 laypeople scored the facial attractiveness using a scale from 1 (an unattractive face) to 10 (a very attractive face). Raters were asked to indicate the apparent age at T2 and the most and least pleasant structures of each face. For maxillary anterior teeth evaluation, digital casts taken at 13 (T1), 17 (T2) and 61 years of age (T3) were used. The following variables were measured in the maxillary anterior teeth using digital dental models: crown width/height proportion, anterior view width, crown angulation, gingival and incisal steps between central/lateral incisors and central incisors/canines. For statistical analyses, three-way ANOVA was used to assess the influence of sex, age and rater group on facial attractiveness. Mann-Whitney test was used to compare male and female regarding the apparent age at late adulthood. For maxillary anterior teeth changes, interphase comparisons were evaluated using repeated measures analysis of variance followed by Tukey tests and Friedman tests. Sexual differences were evaluated using t tests (p<0.05). **Results:** Mature age was judged with lower scores on facial attractiveness (mean=5.43) by both groups compared to adolescence (mean=6.51). Facial attractiveness was not affected by sex. However, at late adulthood, female was considered younger for both groups of raters while men were assigned similarly to their actual age. Laypeople were slightly more critical than orthodontists in the assessment of facial attractiveness. Thirty percent of the raters indicated the eyes as the most pleasant region and the chin and nose as the least pleasing structures. From 13 to 61 years of age, decreases of crown width/height proportion and

mesiodistal angulation of the maxillary anterior teeth were observed. The steps of the gingival margin and the incisal steps decreased during the 47-year follow-up. **Conclusions:** From adolescence to late adulthood, the facial attractiveness slightly decreased from adolescent to mature ages. Women appeared younger than their actual age at late adulthood. untreated individuals with acceptable occlusions demonstrated changes in the maxillary anterior teeth that may impair the smile esthetics and attractiveness.

Key words: Normal occlusion, facial photographs, digital casts, adults, maturation, aging.