

The Visible Portion of Anterior Teeth at Rest

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Abstract

The visibility of anterior tooth surfaces with lips at rest or during function is an important factor in determining prosthodontic outcome. There is a lack of sufficient information published on this subject. The aim of this study was to investigate the degree of visibility of maxillary and mandibular anterior teeth surfaces when the lips are at rest. Four hundred seventy three adults were examined. All the subjects had maxillary and mandibular anterior teeth present with no caries, restorations, severe attrition, mobility, extrusion, or obvious deformities. The portions of anterior teeth that were visible were measured vertically using a Boley gauge from the border of the lip to the incisal edge for the incisors and to the cusp tip for the canines. The measurement was taken at the midpoint of the tooth when the lips and lower jaw were at the rest position. The length of the upper lip was measured from the base of the columella to the tip of the philtrum at the midline of the face. Males showed more of the maxillary lateral, canine, and mandibular anterior teeth than females. With increasing age, the amount of maxillary anterior teeth that was visible at rest decreased. The subjects with shorter upper lips displayed more maxillary central incisor structure than those with longer upper lips. Racial differences were not found. The amount of visible portions of anterior teeth is determined by muscle positions that vary from person to another. It provides an excellent starting point for vertical positioning anterior teeth that can be modified as necessary in any clinical situation. The findings of this study should help the dentist in providing aesthetic prosthodontic treatment that involves replacement of anterior teeth. A useful guideline for positioning anterior teeth is suggested.

Keywords: Esthetic, tooth visibility, tooth exposure, teeth arrangement

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