[Print Version]
[PubMed Citation] [Related Articles in PubMed]

The Angle Orthodontist: Vol. 61, No. 1, pp. 17–24.

Pressure from the tongue on the teeth in young adults

Katrin Fröhlich, DDS, Dr med Dent; Urs Thüer, DDS, Dr med Dent; Bengt Ingerwall, DDS, Odont Dr

^aKlinik fur Kieferorthopädie, Freiburgstrasse 7, CH-3010 Bern, Switzerland

ABSTRACT

Pressure from the tongue on the teeth was measured at the upper and lower central incisors and left first molars in 25 young adults with clinically normal occlusion. Repeated recordings with and without a period for accommodation to the intraoral measuring device, which was connected to an extraoral pressure transducer, were made in the rest position and during chewing and swallowing.

Only minimal effects of accommodation were found. The system can thus be used without a period of adaptation before the actual test. The intraindividual pressure variations were of the same magnitude as for measurements of the pressure from the oro-facial soft tissues on the teeth recorded in earlier studies.

The majority of the subjects had negative pressures at the upper and lower incisors and at the upper molar in the rest position. The pressures on the teeth during swallowing were comparatively great, while pressures during chewing were one-fourth to one-half of the swallowing pressures.

- K. Fröhlich is Senior Instructor in the Department of Orthodontics, University of Bern
- U. Thüer is Assistant Professor in the Department of Orthodontics, University of Bern
- B. Ingervall is Professor and Chairman of the Department of Orthodontics, University of Bern

KEY WORDS: Tongue pressure, Oral function, Soft tissue.