

USE OF THE IOWA ORAL PERFORMANCE INSTRUMENT (IOPI) IN OROFACIAL ASSESSMENT

PRANDINI EL***, Genaro KF

Laboratório de Fisiologia, Hospital de Reabilitação de Anomalias Craniofaciais - HRAC-USP, Bauru/SP

OBJECTIVE: The tongue function can be evaluated by the Iowa Oral Performance Instrument - IOPI (Northwest Co., LLC, Carnation, WA, USA), developed to assess the relationship between the tongue strength and the speech motor control. It is a small portable instrument, easy to use, non-invasive and provides fast, accurate and reliable measurements. It is constituted by a thin flexible plastic tube attached to the device and a plastic rod containing a small air bubble in the final portion. This paper aims to present and discuss the applicability of IOPI in orofacial assessment. **EXPERIENCE REPORT:** The instrument allows evaluating the tongue function by measuring the pressure exerted by it on the plastic bubble positioned in various areas, whose values are given in kilopascals (kPa). The literature provides reference values only for tongue elevation (66kPa) and fatigue test (30-35 seconds). A 27-year-old woman presenting good occlusion was evaluated and oriented to push the tongue against the bubble as hard as possible for 2 minutes during the following tests: Elevation (ELg), pushing the apex against the bubble placed in the incisive papilla; Lateralization (LLg) by pushing the tongue lateral sides against the bubble placed in the molar region, and Protrusion (PLg), pushing the apex bubble placed in the front of the mouth; and Fatigue (TFLg), recording the time of tongue permanence as 50% of ELg value. The values obtained were: ELg=44kPa, LLg=27kPa right and 31kPa left, PLg=34kPa and TFLg=32 seconds. **CONCLUSION:** IOPI allows evaluating the tongue function in an objective way, favoring the analysis of the results of structural and myofunctional interventions. However, further studies are required to provide reference values for the different tests.