

題名:M-mode Ultrasound Imaging of tongue movement during swallowing

作者:彭建綸

C-L. Peng; C.-T. Lin; W.-C. Yeh

貢獻者:牙醫學系

上傳時間:2009-11-23

摘要:AIM: Evaluation of tongue movements during swallowing with a computer-aided, M-mode ultrasonography system in combination with a cushioning device. SUBJECTS AND METHOD: Motion pattern and activity duration of the tongue dorsum during swallowing were investigated in 55 volunteers. RESULTS: The duration, amplitude and pattern of tongue movements during swallowing differed interindividually, whereas they were reproduced well intra-individually. We thus observed three characteristic variations in phases I and IIIb and two in phases IIb and IIIa. The movement pattern in phase IIa and in the rest phase was uniform. CONCLUSIONS: M-mode ultrasonography provides valid information on tongue movements without any side-effects and is thus a useful tool in the diagnosis and research of tongue functions in orthodontics and dentistry.