

Differential diagnosis between infantile and mature swallowing with ultrasonography

彭建綸;林哲堂

Peng CL;Jost-Brinkmann PG;Yoshida N;Miethke RR;Lin CT

Abstract

In order to investigate the difference in tongue movement between visceral (infantile) and somatic (mature) swallowing patterns, 12 visceral (seven females, five males) and 14 somatic (eight females, six males) swallowers were examined with the B+M-mode ultrasound technique. Movements of the tongue tip and submental musculature during swallowing were recorded on video cassette and evaluated with a personal computer. The results demonstrated that the tongue dorsal surface, which was thought to be ideal for observing tongue function, was not suitable for differentiating between visceral and somatic swallowing patterns. Conversely, the movements of the genioglossus muscle were found to be identical within groups but significantly different ($P < 0.01$) from each other between the two swallowing patterns. Therefore, the genioglossus muscle can serve as a reliable means for differentiating between visceral and somatic swallowers.