Transcutaneous electrical stimulation versus traditional dysphagia therapy: A nonconcurrent cohort study.

Blumenfeld, Liza, MA, CCC-SLP; Hahn, Joav, MD; LePage, Amanda, MA, CCC-SLP; Leonard, Rebecca, Ph.D.; and Belafsky, Peter C., MD, Ph.D.

Abstract

Objective: The purpose of this investigation was to critically evaluate the efficacy of electrical stimulation (ES) in treating persons with dysphagia and aspiration.

Study Design: Nonconcurrent cohort study.

Methods: The charts of 40 consecutive individuals undergoing ES and 40 consecutive persons undergoing traditional dysphagia therapy (TDT) were reviewed. Pre- and post-therapy treatment success was compared utilizing a previously described swallow severity scale. A linear regression analysis was employed to adjust for potential confounding variables.

Results: The swallow severity scale improved from 0.50 to 1.48 in the TDT group (P < 0.05) and from 0.28 to 3.23 in the ES group (P < 0.001). After adjusting for potential confounding factors, persons receiving ES did significantly better in regard to improvement in their swallowing function than persons receiving TDT (P = 0.003).

Conclusions: The results of this nonconcurrent cohort study suggest that dysphagia therapy with transcutaneous electrical stimulation is superior to traditional dysphagia therapy alone in individuals in a long-term acute care facility.