CPAP for treating VPI sixteen years post onset J.Stierwalt, P. Rubin, O. Goodell, L. LaPointe, D. Headley, & E. Nimmons

This case report outlines treatment for velopharyngeal insufficiency (VPI) using continuous positive air pressure (CPAP). The individual, who was 16 years post severe TBI, presented with a mixed flaccid-ataxic dysarthria, characterized by reduced breath support, imprecise articulation, weakened pressure consonants, a slowed variable speaking rate, and VPI. Based on the results of an evaluation conducted in January of 2011, a trial treatment with CPAP was implemented. The first phase of treatment was conducted over the course of four weeks (4X/week). The rate of airflow from the CPAP machine was increased at the rate of one cm H_2O per week (treatment was initiated at 4 cm H_2O) while the participant completed a variety of speaking tasks. Following the first phase of treatment, single word intelligibility improved from 44% to 60%. However, sentence intelligibility remained unchanged. A second phase of treatment in which the treatment protocol was doubled from one session to two sessions/day is currently underway. Results from phase 2 and follow up testing will be shared at the conference.