



NSW Speech Pathology Evidence Based Practice Interest Group

Critically Appraised Paper (CAP)

CLINICAL BOTTOM LINE: Head and neck positions may affect the pharyngeal dimensions, which may improve airway protection.

Clinical Question [patient/problem, intervention, (comparison), outcome]: Does Chin tuck eliminate aspiration in patients with dysphagia, characterised by a delayed swallow?

Search Terms: Complete

Search Systems: Complete

Citation: Welch, M., Logemann, J., Rademaker, A., and Kahrilas, P. (1993). Changes in Pharyngeal Dimensions Effected by Chin Tuck. *Archives of Physical and Medical Rehabilitation*. 74:178-181

Design: Non randomised cross over design. Heterogeneous sample with no control group. Patient variables and characteristics not discussed. Etiology of disorder not discussed.

Participants: 30 participants. No Control group. All subjects referred for MBS with complaints of dysphagia. Subjects divided into 2 categories. Male (N=17) Mean age 68.04. Female (N=13) Mean age 65.5. Those who had surgically altered pharyngeal anatomy were excluded.

Experimental Group: Both groups had radiographic magnification of their head and neck anatomy. Patients were asked to place their head in neutral position and also in chin tuck position. 6 measurements of different angles/distances of oral cavity and pharynx were taken in these positions.

Control Group: No control

Results: 4/6 of postural distances/angles significantly changed with the chin tuck position. Chin down does not always widen valleculae.

Comments on Design: The study compares results with historical hypothesis as control. Poor design due to poor subject description influencing reliability and validity of results.

Level of Evidence (NH&MRC): Level 3

Appraised By: Adult S&L and Dysphagia

Date: October 2002