



## NSW Speech Pathology Evidence Based Practice Interest Group

### Critically Appraised Topic (CAT)

This document summaries information gained from several Critically Appraised Papers (CAPs) on one topic. The relevant CAPs should be attached to this document

**CLINICAL BOTTOM LINE:** The effectiveness of positioning in eliminating aspiration needs to be examined under modified Barium Swallow conditions. When trialing positioning a range of strategies should be trialed to determine effectiveness.

**Background and Objectives:** NA

**Clinical Question [patient/problem, intervention, (comparison), outcome]:**

Does chin tuck eliminate aspiration in patients with dysphagia, characterised by a delayed swallow?

**Search Terms/Systems:** Deglutition Disorders/Posture/ Positioning/Aspiration Pneumonia/Video Recording/Video Fluoroscopy/Chin Tuck/Chin Down.  
CINAHL/MEDLINE

**Selection Criteria:** All articles printed in English were review based.

**Results:** 11 Articles were appraised by the Clinical Group. All articles were either Level 3 or 4 on the NHRMC Level of Evidence Scale. The quality of Research reviewed was poor with frequently flawed research design methodology impairing interpretation of the validity of results. The following results were reported

- Chin down may eliminate valleculae pooling but not pyriform pooling. Chin down does not always widen the valleculae space.
- Head Flexion may assist with laryngeal vestibule closure/ Head and Neck positions may alter pharyngeal dimensions, improving airway protection.
- Effortful swallow and Chin tuck may reduce depth of penetration of thin fluids
- When aspiration occurs at small volumes (1ml) positioning is unlikely to eliminate aspiration.
- The combination of the Chin tuck with other strategies eliminates aspiration in Head and Neck populations.
- There is no evidence to support the use of Chin Down in dysphagia originating from tongue base resection.
- There is no evidence to support the use of non-pharmacological therapies in managing dysphagia resulting from Parkinson's Disease.
- Chin tuck may increase aspiration in individual with weak pharyngeal constriction.
- Chin tuck eliminated aspiration in individuals post-oesophagectomy

**Appraised By:** Adult Sp/Lang & Dysphagia Gp

**Date:** November 2002