NSW Speech Pathology
Evidence Based Practice Interest Group

Critically Appraised Paper (CAP)

CLINICAL BOTTOM LINE: Implementation of the Frasier Free Water Protocol has not been shown to increase the risk of developing aspiration pneumonia in patients with dysphagia. The Frazier Water Protocol appears to be an effective method of providing water to patients with dysphagia (known to aspirate), meeting quality of life needs, and, minimising risk of dehydration.

Clinical Question [patient/problem, intervention, (comparison), outcome]: In patients with Dysphagia, what are the benefits and complications of implementing the Free Water Protocol?

Citation: Panther, K., (2005) The Frazier Free Water Protocol. *Swallowing and Swallowing Disorders*. March p4-9

Design/Method: Speech Pathologists completed bedside assessments including videofluoroscopy, review of medical histories, current medical condition and clinical observations and recommended thickened fluids if required but allowed patients water between meals. All patients were screened with water at bedside upon initial assessment. Those with excessive coughing/discomfort were restricted to water under supervision.
Water intake is unrestricted prior to meal but limited to 30mins post meal. Those NBM are permitted water at any time. Those patients who are 'thin liquid restricted' wear yellow bands, reading 'No thin liquids except water between meals. Patients with whom strategies are seen to be effective are encouraged to use those and are recorded on yellow bands. Medications were never given with water. Family education includes empahasis on the rationale for allowing water intake.
Water protocol rational and guidelines are part of nursing competency.

Participants: Patients of Frazier's Acute Rehabilitation facility with dysphagia assessed by a Speech Pathologist

Experimental Group: Patients of Frazier's Acute Rehabilitation facility with dysphagia assessed by a Speech Pathologist

Control Group: No control group

Results: "In the time since implementation, we have seen a very low incidence of aspiration pneumonia at Frazier". A study conducted in the early 1990's, over an 18 month period, (a retrospective chart review of 234 inpatients with dysphagia who received thickened liquids during their admission) showed 2 of the 234 patients developed an aspiration pneumonia and both of these patients were suspected of having aspirated solids.

Comments – Strengths/weaknesses of paper

Weakness:

- The paper is not a 'study'; not randomised control study design, rather it is a report or summary of the principles of the FWP
- Specific aspects that cannot necessarily be replicated at other facilities

Strengths:

- Demonstrates that FWP can be implemented with good outcomes in specific environement/context

Level of Evidence (NH&MRC): Level IV

Appraised By: Adult Swallowing EBP group

Date: January 2011

Form based on Worrall & Bennett, Evidence based Practice: Barriers & Facilitators for Speech-Language Pathologists, *Journal of Medical Speech-Language Pathology* 2:9, xi – xvi **Updated February 2006**

Guidelines for completion of the CAP

Clinical Bottom Line
The consensus of the reviewers on implications of the paper on clinical practice. Whilst this may be somewhat subjective, it is hoped that robust discussion, the Level of Evidence and your comments on the design will enable you to produce a practical/realistic 'bottom line'. Many of the papers in Speech Pathology may have limitations, but the Clinical Bottom line should be aimed to help clinicians apply what evidence there is.

Clinical Question
This should ideally include four components:

- the patient or problem
- the intervention (or diagnostic test or prognostic factor)
- the comparison intervention or test *(optional)*
- the outcome

Design
Refer to pages 12 to 15 of the EBPIG Resource Package for guidance in reviewing the design used.

Comments on Design
Pages 12 to 15 of the Resource Manual should again assist here. You may also find it useful to refer to the forms 'Evaluating case studies/case series' and 'Critical appraisal sheet' adapted from Dr Lil Mikuletic's (see 'Critiquing/Appraising the Evidence).

Level of Evidence
It is recommended that the paper you are reviewing be rated against the NH&MRC Levels of Evidence, as reproduced here. The levels may be updated from time to time by the NH&MRC, but use of the ratings listed here will ensure consistency across CATs and groups. These levels are listed with comments on pages 15 and 16 of the Resource Package.

LEVEL

I. Evidence obtained from a systematic review of all relevant controlled trials

II. Evidence obtained from at least one properly designed randomised controlled trial

III. **1** Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or some other method)

2 Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case-control studies, or interrupted time series with a control group

3 Evidence obtained from comparative studies with historical control, two or more single-arm studies or interrupted time series without a parallel control group

IV. Evidence obtained from case series, either post-test or pre-test and post-test