



The Effectiveness of the Chin-down Posture in the improvement of Dysphagia in Stroke Patients

Shiu- Hao Tai, RN,MSN

Introduction

- Stroke often incurs varying degrees of neurologic deficits, such as mobility, language, swallowing, and cognitive impairment. About 25% to 32% of the stroke patients develop dysphagia, especially choking during eating.
- The severe ones may have silent aspiration pneumonia. For these patients, nasogastric intubation may be vital for adequate nutritional needs.
- The Chin-down swallowing posture is generally considered a safe adjuvant clinical technique for patients with dysphagia to prevent tracheal aspiration and silent aspiration pneumonia.

Purposes

- This study investigates the effectiveness of the Chin-down swallowing technique in the improvement of dysphagia in stroke patients.

Subjects

- Subjects were selected by purposive sampling from in stroke patients with dysphagia the rehabilitation and neurologic department of a medical center.
- Patients with brainstem stroke, brain trauma, or past cervical vertebra damage were excluded; patients with unstable vital signs, those who could not follow instructions, and those who could not perform the maneuver were also excluded.

Methods

- This study was a quasi-experimental design conducted in January 2013 to December 2013 .
- Those patients who met the inclusion criteria were alternately assigned to the experimental group and the control group, for 30 patients in each group and a total of 60 subjects.
- The experimental group applied the Chin-down swallowing technique at least 3 times a day, 3-5 minutes at a time, for a period of 4 weeks. Nurse completed “The Dysphasia Assessment Scale “and “The Swallow Self-assessment “as the evaluation of the experiment outcome at the beginning and after 4 weeks of training.

Results

- The results of this research showed 68.3% with cerebral infarction, 66.7% on oral feeding, 78.3% first-time stroke.
- The chi-square and paired t-test were used to compare the effect of Chin-down swallowing training.
- There were significant differences ($p < .05$) in the dysphasia assessment scale between the difference of pretest and post-test among 2 groups in the questions: (1) the need of careful swallowing, (2) inability to maintain food in your mouth, (3) awake up choking with saliva, (4) having swallowing difficulty, (5) having ENT problems.

Results

- Comparing the differences between pretest and post-test in swallow self-assessment showed significant differences ($p < .05$) between experimental group and control group in (1) difficulty with swallow causes weight loss, (2) swallow causes pain, (3) cough during eating, (4) pressure in the throat swallowing.

Conclusion

- This study confirmed the effectiveness of the Chin-down swallowing technique to improve dysphagia among the stroke patients.

Clinical Applications

- The care of stroke patients is a very important topic. Nursing staffs being the front-line of a health care team, play an important role in assessing patient's swallowing problems.
- Reinforcing clinical nursing staffs to equip the skills of evaluate swallow difficulty for early intervention is important for stroke patients to improve their dysphagia.
- Teach stroke patients and their care-giver how to perform Chin-down technique correctly as soon as possible would be beneficial, and would promote the quality of clinical care tremendously.