

# Dysphagia and Oral Health: Implementing a Modified Free-Water Protocol in Long-term Care Residents

## Objective

To examine the feasibility of implementing a modified free-water protocol with oral hygiene care.

## Practice Points

1. Routine oral hygiene care facilitated by a nursing staff member with a child-sized soft toothbrush was well-tolerated in older adults with neuro-cognitive decline.
2. The Registered Dental Hygienist (RDH)'s oral assessment and debridement of accumulations and biofilm can be effectively managed in the patient's own accommodation.
3. Familiarity with the clinician, and the routine of the twice-daily oral cleaning promotes tolerance and cooperation. Individuals who can participate in their own oral hygiene self-care should still be encouraged to do so.
4. The modified free-water protocol aims to allow patients to quench their thirst with the idea that aspiration of water is likely to be a "benign" event. It is well tolerated and does not increase risk of respiratory infections in a cohort of older adults with dysphagia.

## Methods (PI: Dr. R. DiDonato)

1. The participants (N=28) recruited and consented were older adult residents with neuro-cognitive degenerative disease from four nursing units at the Pleasant View Towers long-term care facility. These participants were randomly assigned either to the experimental (modified free-water protocol with oral care) or control condition ('friendly' visit) of the study. This prospective clinical trial was registered at [www.clinicaltrials.gov](http://www.clinicaltrials.gov) (NCT03672552).
2. All participants received a clinical bedside oral-pharyngeal dysphagia and mealtime assessment, the dental hygiene assessment and debridement of accumulations and biofilm (RDH), and a nutrition assessment.

3. A) The Experimental group received RDH debridement prior to implementing the modified Frazier free-water protocol (FFWP). The FFWP allows for ingestion of thin ('free') or non-thickened water or ice chips any time before or 30 minutes after a meal, following appropriate oral hygiene (tooth-brushing) prior to ingesting of thin water. The resident was approached twice daily (Monday-Friday) and offered the extra oral care prior to being offered the 3-ounces of thin-unmodified water.

B) The Control group received the RDH debridement at the end of the study period. The Control group received the 'sham' intervention; they were approached daily (Monday-Friday) and offered a 5-minute 'friendly' visit from a research assistant.

## Results

- There was no significant difference for symptoms of respiratory infections (congestion, cough, fever, diagnosis of pneumonia or admission to hospital), but the power to detect a difference was low. However, feasibility for doing FFWP was demonstrated.

## Conclusions

1. The FFWP was feasible and gave no signal for harm (first do no harm), consistent with reports from studies of older adults with dysphagia.
2. The FFWP offers an option for management of fluid restrictions for those with dysphagia, autonomy, and the pleasure and comfort for continued ingestion of thin water.