

Greetings from the Communication & Advocacy Committee! Welcome to our current E-BITE. Please enjoy and continue to share your news with us at usa.communications@iddsi.net

# **United States IDDSI Reference Group Newsletter for April 2022** April is Head and Neck Cancer Awareness Month

In this month's Research Highlight, read about "Long-term swallowing-related outcomes in oral cancer patients receiving proactive swallowing therapy."

Tseng, Wen-Hsuan, et al. "Long-term swallowing-related outcomes in oral cancer patients receiving proactive swallowing therapy." Oral Oncology 122 (2021): 105569.



Head and neck cancer (HNC) is a malignant disease most often occurring in the oral cavity, pharynx, and larynx, though may also be seen in the salivary glands, sinuses, or muscles of the head and neck. Approximately two-thirds of HNC patients are diagnosed at an advanced stage of disease. Though modern treatment for HNC aims to maintain swallowing function, seventy percent of HNC patients develop dysphagia. Recent studies have revealed that improving functional dysphagia outcomes is supported by the benefit of early swallowing intervention, which may include evaluation of pre-treatment swallow function and recommendation for swallowing rehabilitation with or without dietary modifications. Current practice aims to promote continued use of the swallowing musculature to prevent the weakening and stiffening of

swallowing muscles for improved safety and efficiency of swallow function.

The purpose of this study was to assess the impact of proactive swallowing rehabilitation on swallow function and guality of life in oral head and neck cancer patients over the first two years of definitive treatment (a treatment plan chosen as the best option when all others have been considered). This prospective study included 104 patients with oral HNC who underwent radical surgery and free flap reconstruction followed by adjuvant radiation therapy, which is an additional cancer treatment provided after the primary treatment to lower the risk of recurrence. Prior to surgery, the participants were seen by an otolaryngologist and speech-language pathologist who specialized in presurgery therapy. From this visit, participants were given a home exercise program to be completed as two 20-30-minute sessions per day, seven days per week. The exercises included oral motor stretching, strength and range of motion activities, various swallow maneuvers, and pharyngeal strengthening exercises. One-week post-surgery, patients began attending swallow therapy session two times per week and then monthly after hospital discharge. This therapy session involved continuation of exercise protocol prescribed pre-op, compensatory swallowing postures/maneuvers and education on necessary diet/liquid modifications. Nutritional status, swallowing function assessed with a standardized flexible endoscopic evaluation of swallowing (FEES) protocol utilizing the PAS (Penetration-Aspiration Scale), quality-of-life, and

adherence to exercises were assessed pre-surgery and then at 1, 3, 6, 12 and 24 months after adjuvant radiotherapy. FEES were completed using three trials of 10 ml of dyed thin liquid (THIN, LEVEL 0) and three trials of 10 ml of puree (PUREED, LEVEL 4) and pharyngeal residue was rated and recorded. Reported outcomes included weight, penetration-aspiration (PAS) scale, Functional Oral Intake Scale (FOIS), EAT-10, MD Anderson Dysphagia Inventory (MDADI), and patientreported percentage of exercises completed. With the FOIS, diet textures tolerated by participants were recorded in appropriate IDDSI levels. Adherence to the prescribed exercises program was measured as poor (less than 2 days per week), moderate (3-4 days per week) and good (daily).

### Results:

- Nutritional status: Patients displayed a significant decline in body weight from pre- to one-month post-treatment. Body weight improved at the three-month follow-up.
- Swallowing function:
  - PAS scores showed improvement at 6-, 12- and 24-month mark. Of note, 98.9% of patient demonstrated normal or flash penetration (PAS less than or equal to 2) at baseline on FEES exam.
  - FOIS scores showed improvement at the one-month post treatment mark. A total of 94% patients were free of tube feeding at 12 months but with a modified diet or a diet requiring various compensatory techniques.
  - At baseline, most study participants tolerated oral intake; this percentage decreased at the one-month mark and then steadily increased at the 3-, 6- and 12-month mark and remained steady when assessed at the 24-month mark.
- Quality-of-life: Patients displayed a significant decline in MDADI scores from base line to onemonth post-treatment. Improvement was also noted at the three-month mark, with an unfortunate significant decline then noted at 24-month post adjuvant radiotherapy treatment.
- Adherence: All participants were observed to have a decline in exercise program adherence when measured at one-month post-treatment.
  - Participants who performed their exercise routine moderately (3-4 times per week) or daily had faster recovery

of swallow function and improved swallowing related quality of life as measured by the FOIS and MDADI when comparted to participants who performed their exercise routine poorly (1-2 times per week).

Discussion: This investigation utilized the IDDSI framework to standardize the study protocols. IDDSI continues to be utilized to help move toward standardized study protocols across various areas of dysphagia research. Such standardization is important to not only future investigations, but also for everyday practice patterns and interventions conducted by multidisciplinary service providers around the world in a variety of work settings.

Overall, this research supports proactive swallowing treatment and adherence to an individualized exercise program for oral head and neck cancer patients to allow for better recovery of swallowing function post treatment and improved swallowing quality of life, thus, facilitating safe oral intake and adequate oral nutrition.

Celebrate IDDSI success with the Spaulding Rehabilitation Network from Massachusetts!

IDDS **Spaulding Rehabilitation Network** 

### More TIPS From Spaulding:

- Purchase vegetable/fruit dicing plate for equal cuts.
- Product swaps & process changes helped us create a good amount of options for Levels 5 & 6.
- Add side of sauce to the tray for floor staff to add at time of service. Take Good
- Maximize "always-available" foods options.

 Competencies: diet techs, cooks, dietitians, SLPs

 Involve the whole team from the beginning.





## TIPS From Spaulding Rehabilitation Network (Mass.)

- SLPs, RDs, food service staff meet to review tray audits
- Add products to help expand Level 5 & 6 offerings, such as small pasta (e.g., ditalini) & couscous.
- Add gel thickener to sauces to prevent liquid seeping.
- Chicken & tuna salad filling is minced & moist for all.

