# Dysphagia management and OT's role: A unique perspective

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Occupational therapist palpates the neck to feel for laryngeal elevation during the swallow.

Imagine having one of your most basic needs taken away from you—the ability to eat. Now, imagine having to rearrange the way you live your life—your routines, your roles, and your personal relationships—all because of a disruption of this basic need. Each year, 1 in 25 adults have dysphagia, or difficulty with swallowing (Bhattacharyya, 2014). Swallowing is a process so automatic for most of us that we take it for granted until we can no longer do it with ease. We go to the refrigerator, gather our snacks, and eat while we multitask throughout our day. For individuals with dysphagia, these simple tasks are luxuries they don't get to experience.

In our specialized role as occupational therapy dysphagia practitioners at Mayo clinic in Rochester Minnesota, we address dysphagia management with individuals in the acute setting. We use our unique skills as occupational therapists (OTs) to assess the whole person beyond their swallow function. In acute care, dysphagia may be present for a variety of reasons that can be related to prolonged intubation, neurological changes, anatomical changes, cancer, or transplant surgeries. Many patients at Mayo Clinic have complex and multifactorial medical issues and often have a combination of these factors that have led to their dysphagia. The medical teams following these patients consult the OT dysphagia therapists to assess and determine each patient's ability to swallow and consume oral nutrition safely. The therapists assess each patient's risk of aspiration through clinical bedside evaluations and instrumental evaluations using videofluoroscopy capability alongside a radiologist.

## Clinical Bedside Evaluations

After a thorough chart review of the patient's history of dysphagia, their presenting symptoms/risk factors, and the reason for the consultation, the OT dysphagia therapist completes a bedside evaluation. The OT dysphagia therapist develops an occupational profile of the patient through interview and questioning and assesses patient factors, such as cognition, that may affect swallowing performance. The OT dysphagia therapist performs an oral motor screen of the lips, tongue, cheeks and jaw and assesses the patient's respiratory control prior to initiating oral trials. When a patient is deemed alert enough and it is safe to proceed to oral trials, the OT dysphagia therapist presents liquids of varying viscosities, purees, and solids to assess manipulation of food in the mouth and the ability to swallow without signs of aspiration. Throat clearing or changes in vocal quality with oral intake may indicate that material has penetrated the airway and is resting on the vocal cords. Coughing may indicate that material is going beyond the vocal cords into the lungs, also known as aspiration. In some cases, a patient may be aspirating on material and not have a protective reflexive cough to expel the material from their lungs; this is called silent aspiration.

## Videofluoroscopic Swallow Study (VFSS)

When signs of possible aspiration are observed during the bedside evaluation, or a patient has a history of silent aspiration, a VFSS may be recommended. During a VFSS, the OT dysphagia therapist and the radiologist work together to assess the swallowing mechanics of the patient. The OT dysphagia therapist presents varying liquids and solids much like at the bedside; however, this time the items contain barium so the team can see how the bolus is reacting in the oral cavity and throat when swallowed. The radiologist runs the videofluoroscopy camera that saves the short video clips for review. The VFSS provides key pieces of information needed for making the safest diet recommendations and determining the effectiveness of swallowing strategies used during the exam. Another benefit of a VFSS is the ability to identify impairments that arise during the video and determine which swallowing exercises may be most effective in addressing those impairments.

## Treatment Interventions

After we have completed our evaluations and have created a comprehensive and individualized plan of care for each patient, we employ a variety of treatment strategies to help them improve in their swallowing performance. For some individuals, education on simple habit changes such as taking smaller bites, eating at a slower pace, and sitting upright when eating can assist in improving swallowing safety. Individuals with impaired cognition may need to rely on caregivers or staff to provide external cues throughout meals to employ safe eating strategies.

Patients may also require set-up assistance with meals, use of adaptive equipment, or positioning strategies to assist in increased safety with oral intake. Educating the

individuals caring for the patient and ensuring carryover of aspiration precautions is an important part of our treatment plan.

For individuals who demonstrate deficits in swallowing mechanics, such as a delayed or weaker swallow, oral motor weakness, or pharyngeal deficits, OT dysphagia therapists can facilitate an exercise program to supplement their sessions. Exercises can focus on improving the strength of the swallow, increasing hyolaryngeal excursion, or strengthening the tongue. If a patient is not able to tolerate a regular diet safely, they may need to have their diet textures and liquid consistencies modified. Dysphagia diets are served in a range of consistencies including pureed textures and foods that are cut up with added moisture. During our treatment sessions, we address each individual's ability to tolerate their current dysphagia diet and assess their ability to progress to the least restrictive diet. We do this through the use of meal observations and "trial trays" or practice trays of upgraded diet textures in the hope that they may return to their baseline diet.

As dysphagia therapists, we always strive to get a patient back to their baseline diet before they leave the hospital. Despite our best efforts, there are times when patients are medically ready for discharge and must leave before they have returned to their baseline diet. When patients discharge on a modified diet, we focus on educating them and providing them with tools to be successful in the transition to their current "normal." We take a collaborative approach alongside a registered dietitian to educate the patient on the reasons for the modified diet recommendation and provide training sessions to the patient/caregiver on ways to prepare and test the consistencies of their food to ensure it fits safely within the parameters of their recommended diet. This team approach to dysphagia management is used throughout our work with each patient, working closely with the primary medical team, the GI specialists, pulmonary staff, nursing staff, and OT dysphagia therapist or SLP at the discharge environment to ensure comprehensive and continuity of care for all the patients we serve.

## OTs Bring Unique Skills to Dysphagia Management

Although it is often not the primary therapists treating dysphagia, OTs are involved in eating, feeding, and swallowing across the lifespan. The American Occupational Therapy Association (AOTA) provides us with official documents that support our role in dysphagia evaluation and treatment: *The Practice of Occupational Therapy in Feeding, Eating, and Swallowing* (2017) and the *Occupational Therapy Scope of Practice* (2021). The fourth edition of the *Occupational Therapy Practice Framework: Domain and Process* (*OTPF-4*; AOTA, 2020), identifies feeding, eating, and swallowing as an ADL. Addressing all components of this very needed ADL holistically during a mealtime ensures that the occupation is safe and enjoyable to the individual for optimal quality of life (Hasselkus, 2006). OTs play an integral part of the interprofessional team to efficiently and effectively improve not only dysphagia outcomes, but also patient satisfaction, by providing the "just right challenge." OTs are trained in activity analysis, breaking down the parts of the task to determine what is making the swallow difficult for each individual patient.


Occupational therapist evaluating patient eating applesauce during a tableside dysphagia assessment.

## Ways All OTs Can Help Patients With Dysphagia Management and Safety

- Conduct thorough chart reviews and patient interviews to understand the reasoning behind a patient's dysphagia and consider ways you can help.
- Address the cognitive issues related to dysphagia. Your patient may need help choosing the right foods or may need a cue card made for them to remember the compensations a dysphagia therapist has provided.
- Address the physical needs for self-feeding and positioning.
- Address visual neglect and visual spatial issues by attending to placement of food items or providing contrasting colors for the plates and food.
- Discuss the psychosocial components that may be involved.
- Collaborate with the dysphagia therapist and the dietician if there are concerns with the current diet or with patients not getting enough nutrition.
- Provide therapy during meals to assist with follow through while addressing the whole person.

 Registered Dietitian determining expected oral transit time of thickened liquid for dysphagia assessment on patient.

## Addressing Future Needs in Dysphagia Management

Although we address dysphagia through a holistic lens while the patient is in the hospital, there are ways to better expand our resources for the patient post-discharge. Future considerations to further assist in increasing the quality of life of individuals with dysphagia could include a dysphagia social group where individuals participate in a weekly meal at varying restaurants. This would allow patients the opportunity to practice ordering appropriate items off the menu, practice mealtime strategies, and provide strategies to one another. Another consideration could be a modified diet cooking class for patients or caregivers. Dysphagia goes beyond the inability to swallow; it is a diagnosis that often comes with social isolation, anxiety, and poor quality of life. As OTs, we are taking a holistic approach to dysphagia diagnosis, treatment, and management. We look at the environmental and personal contexts to see how we can assist our patients in their acute dysphagia stage as well as connecting them with outpatient OT dysphagia practitioners and community resources. We can improve in our overall approach to educate and empower our patients to work through these barriers and improve their quality of life after they leave the hospital.


Radiologist and occupational therapist obtain images during a video swallow study while patient ingests food.

## Case Example

L. C. came to the hospital following a motor vehicle accident, with multiple fractures and organ trauma, She required extended intubation, followed by placement of tracheostomy. During bedside evaluation, L. C. had minimal activity tolerance and had difficulty managing her own secretions. She was made NPO (nil/nothing by mouth) and assessed daily in preparation for oral trials. When L. C. was able to stay off the ventilator and tolerate wearing a cap on her trach for most of the day, the OT dysphagia therapist completed oral trials at bedside with an RN present for suctioning. The RN completed tracheal suctioning after oral trials to assess if the puree was reaching the airway. When no residue was seen on the suction tubing and L. C. was demonstrating the ability to stay awake and alert, a VFSS was scheduled. Due to aspiration with thin liquids during the video and a weak swallow resulting in increased effort getting pureed solids down, L. C. was kept NPO, with a plan to do therapeutic feeds (practice swallows) with the OT dysphagia therapist and complete daily swallowing exercises. Her goal during all her therapies was to be able to eat a cheeseburger again. VFSS was repeated 2 more times (7 to10 days between each one). On the final study, L. C. no longer had the trach, and although she had penetration of thin liquids into her airway, soft solid textures went well. L. C. was recommended a diet with thickened liquids and food cut up into smaller pieces with increased moisture. Prior to discharge from the hospital, we were able to do a “trial tray” with a cheeseburger and get L. C. back on a regular diet with exercises and compensatory strategies to continue at home. L. C. was smiling ear to ear, announcing to everyone who entered the room that she was eating a cheeseburger.

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