

Swallow Screen for Dysphagia Reflection Assignment

Swallowing plays an integral role in food digestion and preventing the entrance of food and other materials into the lower respiratory tract. To achieve this, precise coordination is necessary between breathing and swallowing since the pharynx serves as a common pathway for both respiration and digestion. If there is a problem with the neural control or the structures involved in any part of the swallowing process, dysphagia occurs.¹

Dysphagia is characterized by difficulties swallowing and, in certain cases, pain while swallowing (odynophagia). Some people may be unable to swallow at all or may have difficulty swallowing beverages, meals, or saliva securely. When this happens, eating becomes challenging. Dysphagia frequently makes it difficult to consume enough calories and fluids to sustain the body and can lead to other major medical concerns.²

Firstly, I wasn't aware that dysphagia was a symptom of an underlying disease process rather than being the disease process itself. I always assumed it was a disease like stroke, coronary artery disease and GERD etc. Secondly, I didn't realize what a complex process swallowing is and that any abnormality or disorder along the reflex arc has the potential to induce a delay or impairment in swallow function. Thirdly, I always assumed dysphagia was a condition that occurred mainly in the elderly and lastly, that RDNs didn't have a significant role in identifying dysphagia in patients. After watching the webinar on Swallow Screen for Dysphagia, I was able to reevaluate these presumptions.

What I appreciate the most about this webinar was how detailed it was when explaining the process of swallowing. Throwing out interesting facts during the discussion such as how 50 pairs of muscles and 6 cranial nerves are involved in a single instance of swallow, that a person ceases to breath at the exact moment of swallowing, and the importance of the airflow gradient when swallowing, showing that breathing with your mouth slightly open is more challenging than when it is closed, keeps you engaged throughout.

Dysphagia is diagnosed by both Videofluoroscopy and the Flexible Endoscopy Evaluation of Swallowing (FEES). Videofluoroscopy is commonly referred to as modified barium swallow study (MBSS). The procedure uses x-rays with barium to image swallowing movements. It's considered the gold standard for diagnosing dysphagia. Flexible Endoscopy Evaluation of Swallowing (FEES) as the name suggests, uses a flexible endoscope inserted through the nostrils and is routed to the laryngopharynx. This procedure does not involve barium/radiation however, a "white out" occurs during the act of swallowing due to the anatomy covering the camera so only the before and after of a swallow can be observed.

As someone who retains information better when it's visually presented, showing what happens during a normal swallow and when the bolus enters the airway with both MBSS and FEES was extremely helpful and informative. The presenters of the webinar showed the different anatomical structures of the mouth and esophagus and walked us through the entire process from when food is taken into the mouth and when it is swallowed, highlighting the differences between normal and abnormal aspirations.

There are six tools that are used to screen for swallowing. The Repetitive Saliva Swallowing Test (RSST), Yale Swallow Protocol/3-ounce Water Test, and The Gugging Swallowing Screen (GUSS) are the 3 direct methods to assess whether a patient needs further screening for dysphagia and the Eating Assessment Tool (EAT-10), Swallowing Quality of Life Questionnaire (SWAL-QOL), and Swallowing Disturbance Questionnaire (SDQ) are the 3 indirect clinician facilitated methods. *The goal is to obtain information on swallowing from the patient's perspective to guide clinicians on the major concerns and impact of dysphagia on quality of life.* This webinar highlighted the importance of a CRDNs role in conducting bedside swallow screenings using these indirect assessment tools.

In conclusion, swallowing is a complex process that involves numerous muscles and nerves. Dysphagia can be caused by any disorder that weakens or destroys these muscles and nerves or causes constriction of the back of the throat or esophagus. There are several signs and symptoms associated with dysphagia such as coughing/clearing of throat, long mealtimes, malnutrition, and abnormal volitional cough etc. As the prevalence of dysphagia is rising in children and adults, it's vital that MedSLP and RDNs work together to conduct swallow screenings and identify those individuals who may need further examination for dysphagia diagnosis. Overall, this webinar proved to be informative and enhanced my knowledge on the importance of swallowing.

References

Nishino T. The swallowing reflex and its significance as an airway defensive reflex. *Front Physiol.* 2013;3:489. Published 2013 Jan 7. doi:10.3389/fphys.2012.00489

<https://www.nidcd.nih.gov/health/dysphagia>