

Navigating Dysphagia in the SNF Setting: Case Study

Demographics: Patient is an 87 y/o male living in a SNF. Patient is wheelchair dependent and requires stand-by assist for transfers and upper and lower body dressing. Patient feeds himself. Patient's wife is his POA.

Referral Source: Per staff report, patient with frequent episodes of coughing during intake and occasional vomiting following meals per nurse report since discharge from therapy two months ago.

Last week, patient had two choking episodes requiring the Heimlich maneuver. Nursing and physician downgraded patient diet back to puree texture and nectar thick liquids per recommendations of MBS that was completed in December 2019. They want you to re-evaluate and "do what you can".

Prior Medical History (PMH): Myasthenia Gravis, unspecified dementia without behavioral disturbances, (staged at high middle level), cerebral infarction due to stenosis of unspecified cerebral artery (2017), hypertension, GERD, IDIOPATHIC) NORMAL PRESSURE HYDROCEPHALUS, pseudobulbar effect, constipation, type 2 diabetes mellitus without complications, allergic rhinitis, old myocardial infarction, personal history of other disease of the digestive system, disturbances of salivary secretion, presence of coronary angioplasty, transient cerebral attack, unspecified, repeated falls, pure hypercholesterolemia, and obstructive sleep apnea (CPAP machine at night).

Medications: Magnesium, Prednisolone (corticosteroid), Pyridostigmine (AChE inhibitor),

Note: Muscular weakness due to myasthenia can be exacerbated by certain drugs acting at the level of the neuromuscular junction to reduce the release of acetylcholine or the sensitivity of the acetylcholine receptor.

History of dysphagia: Per chart review, the patient has chronic dysphagia secondary to CVA and myasthenia gravis and has had ST services in the SNF and home health settings. Reviewing the previous speech therapists' evaluations and notes, patient was seen for compensatory strategy education and strengthening in conjunction with NMES. Patient presents with no dysarthria.

Background info from nurse report and chart review: Prior to readmission to SNF, where he has been a resident again for approximately 9 months, patient was at home and eating regular diet/thin liquids. Patient was admitted to the hospital for suspected transient cerebral attack and myasthenia exacerbation in April 2019 and a PEG tube was placed. Patient was then admitted to the SNF on tube feedings only and on compassionate care. Patient re-evaluated in November when family requested patient to be removed from compassionate care and requested an MBS (see results below). Following MBS, patient was admitted to previously employed SLPs caseload and was put on recommended diet of puree texture and NTL with thin water protocol. Patient was compliant with therapy and education for compensatory strategies while with therapist, however, was often taking food from other plates. Patient advanced to mechanical soft trials with therapist but continued with NTL at mealtimes. Nursing had patient sign a diet waiver to reduce "their liability" due to patient frequent non-compliance with recommended diet when ST was not around. Patient was then advanced per diet waiver to regular texture and thin liquids. ST continued to target strategies and exercises with patient preferred diet and discharged following 3 total months of therapy.

Background information on myasthenia gravis/ details from research: Myasthenia gravis is an autoimmune disorder characterized by weakness and rapid fatigue of any of the muscles under voluntary control. It is caused by a breakdown in the normal communication between nerves and

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muscles. Involvement of the facial and pharyngeal muscles affects speech and swallowing, while progression to the proximal limb muscles can cause generalized weakness. Research has shown silent aspiration occurs in 35% of mild to moderate MG (Kumai, 2018).

Imaging:

MBS Results completed 12/19/2019 report:

“Patient has premature loss of bolus to level of pyriform sinus cavity with all trials presented.

Honey and nectar thick liquids from teaspoon, cup and straw with premature loss of bolus to the level of pyriform sinus, initiation of swallow WNL and no penetration/aspiration occurs in 3/3 trials at each intake level, Mild residue remains on posterior pharyngeal wall that is cleared with subsequent swallow.

Thin liquids from teaspoon and cup: premature loss of bolus to level of pyriform sinuses. Upon initiation of swallow, penetration of laryngeal vestibule to level of vocal cords on 4/4 trials each with no attempt to cough or eject bolus from airway. No aspiration occurs.

Thin liquids from straw: premature loss of bolus to level of pyriform sinus. Upon initiation of swallow, penetration of laryngeal vestibule to level of vocal cords occurs following the swallow with eventual frank aspiration below the vocal cords occurs following secondary swallow. Pt had significant cough response and required several minutes to catch his breath.

Purees: Premature loss of bolus to level of pyriform sinus. No penetration or aspiration occurs. Trace amounts of residue remains in vallecula that patient clears with subsequent swallow.

Mechanical Soft: Piecemeal deglutition and incomplete bolus formation noted. Premature loss of bolus to pyriform sinuses. No penetration/aspiration occurs, pt. swallows twice per bolus due to piecemeal bolus formation.

Regular: Piecemeal deglutition, prolonged mastication of stick bolus, and incomplete bolus formation noted. Premature loss of bolus to pyriform sinuses. No penetration/aspiration occurs, pt swallows twice per bolus due to piecemeal bolus formation.

Mixed consistency: Piecemeal deglutition and incomplete bolus formation noted. Premature loss of bolus to pyriform sinuses. Flash penetration of liquid that is cleared from airway, pt swallows twice per bolus due to piecemeal bolus formation.

Recommendations: Purees, nectar thick liquids. Straws allowed. Small bites/sips, alternate bites/sips, upright for 90 degrees for all intake. Advance to mechanical soft when deemed safe per facility SLP”

Chest X-Ray completed 4/30/2020 results: “The lungs are clear without evidence of focal pneumonia, pneumothorax, adenopathy, or effusion. The cardiomeastinal contours and bony structures are within normal limits. No midline shift of structures identified.”

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Questions:

1. What is the first thing you should do to begin your evaluation?
2. What chronic or acute precipitating factors are there?
3. Any predictors of aspiration pneumonia?
4. What does your clinical exam look like?
5. Would you do the Yale Swallow Protocol with this patient?

During oral trials, you note the patient has immediate cough response across most consistencies and often exhibits delayed throat clears. Also, Patient reports he is not happy about his diet and “doesn’t want that sludge.” You note patient to have thin juice and crackers in his room.

6. Can you make diet recommendations based on the MBS from 6 months ago? What does the report tell you about the physiology?
7. Do you agree with the recommendations from the MBS based on the report you were given?
8. Do you think that given the results of the MBS and overt responses with coughing across all intake, the patient would benefit from another assessment that looks at ability to control bolus size and viscosity?
9. Are there any consults/referrals that need to be recommended based on what you read?
10. What about the patient’s rights, would a diet waiver or informed consent be the way to go here?

During your assessment, you noted that the patient is impulsive and continues to eat/drink during coughing episodes.

11. What strategies could you teach this patient?
12. How do you handle the discussion with nursing, dietary, and physician about not making diet recommendations based on just your CSE?
13. What is an example of a goal you would put on your initial evaluation?

The next day, the patient refuses an instrumental and does not want to participate in therapy after you complete the initial evaluation. You provide further education on potential risks and the benefits of an instrumental and your swallow, as well as all your findings during your CSE with the patient and his spouse. The patient states he wants his “coffee like it should be”, and “wants to eat a hotdog on the bun”. Patient’s wife says, “It’s up to him”.

What do you do?

Nursing and dietary staff continue to give him puree diet and nectar thick liquids despite documentation of informed consent and patients wishes. You overhear them saying “That speech therapist didn’t do her job”.

14. How do you educate them on patients’ rights?
15. What is another topic that would be extremely important to this patient that you could provide staff education or an in-service on?

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1. Kumai Y, Miyamoto T, Matsubara K, et al. Assessment of oropharyngeal swallowing dysfunction in myasthenia gravis patients presenting with difficulty in swallowing. *Auris Nasus Larynx*. Published online 2018. [aurisnasuslarynx.com/article/S0385-8146\(18\)30600-X/fulltext](http://aurisnasuslarynx.com/article/S0385-8146(18)30600-X/fulltext). Accessed January 14, 2019