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Speech and Swallowing Disorders in Myotonic Dystrophy



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Objectives:

- Explain the role of SLP in the evaluation and treatment of speech and swallowing difficulties in Myotonic Dystrophy.
- Discuss interventions and strategies to improve communication.
- Discuss interventions and strategies to improve swallowing.

Speech Disorder: Dysarthria

- "Dysarthria refers to a group of speech disorders characterized by abnormalities in the strength, speed, range, steadiness, tone, or accuracy of movements required for breathing, phonatory, resonatory, articulatory, or prosodic aspects of speech production" (Duffy, 2013, p.4).

Dysarthria in Myotonic Dystrophy

- *Reduced loudness*
- *Short phrases*
- *Limited range of pitch*
- *Hoarse vocal quality*
- *Imprecise consonants, distorted vowels*
- *Hypernasality*
- *Slow rate of speech*

Speech Evaluation

- *Interview*
- *Physical examination*
- *Evaluation of speech production*
- *Provide education on cause of impairments*
- *Review recommendations*
- *Create functional goals*

Speech Therapy

- *Personalized to each patient*
- *Exercises*
- *Training of speech strategies*
- *Education and counseling of patient and loved ones*
- *Alternative means of communication*

Strategies to Improve Speech

- *Repeat (message/word or phrase)*
- *Over articulate*
- *Increase loudness*
- *Change rate of speech*
- *Rephrase*
- *Spell key words*

Communication Partner Tips

- *Allow extra time for communication*
- *Watch your communication partner*
- *Tell the speaker you did not understand what was said*
- *Repeat messages to confirm what has been said*
- *Discuss how your loved one would like you to assist his/her communication in social situations*
- *Consider having your hearing checked*

Environmental Considerations

- *One on one conversations*
- *Position communication partners in close proximity*
- *Decrease or eliminate back ground noise*
- *Well lit rooms*
- *Have an alternative method of communication*

Alternative Means of Communication

- Low tech - writing, letter boards
- Middle tech - text to speech applications on a smart phone or tablet
- High tech - speech generating device

What is Dysphagia?

- Dysphagia is defined as a problem involving the oral cavity, pharynx, esophagus or gastroesophageal junction (AHS.org)
- Aspiration is defined as entry of secretions, food, or any foreign material into the airway that travels below the level of the true vocal folds. Aspiration may occur before, during or after the pharyngeal phase of swallowing. It can also occur for reflux of gastric contents. (ASHA.org)

Dysphagia in Myotonic Dystrophy

- *Poor oral management of liquids and solids*
- *Food and liquids leaking from the nasal cavity*
- *Complaints of food “sticking”*
- *Pain with swallowing*
- *Coughing during or after a meal*

Dysphagia in Myotonic Dystrophy

- *Difficulty coordinating breathing and swallowing*
- *Changes in eating habits i.e. avoiding certain foods or liquids*
- *Unintentional weight loss or dehydration*
- *Difficulties with swallowing cold foods or liquids*
- *Fatigue during meals*

How does a SLP evaluate swallowing function?

- Clinical swallowing assessment - a speech language pathologist will interview patient, perform a physical exam and observe swallowing.
- Modified Barium Swallow (MBS) - completed in radiology under fluoroscopy with a radiologist and speech language pathologist.
- Fiberoptic Endoscopic Evaluation of Swallowing (FEES) - completed in office by an otolaryngologist (ENT) and speech language pathologist.



Interventions for Oral & Pharyngeal Dysphagia

- *Diet modifications – soft moist solids, thickened liquids, avoid cold items, liquid supplements*
- *Equipment/utensils – cups to slow flow of liquid*
- *Maneuvers*
- *Pacing and feeding strategies – small bites and sips*

Interventions for Oral & Pharyngeal Dysphagia

- *Postural/position techniques – chin tuck, eating/drinking in upright position*
- *Education/counseling on aspiration precautions*
- *Counseling on alternative means of nutrition*

How can a SLP help with Esophageal Dysphagia?

- Provide education and counseling on food and liquid modifications
- Provide education and counseling on lifestyle modifications

Reflux Lifestyle Modifications

- *Weight loss*
- *Elevating upper body when sleeping*
- *Avoid acid reflux inducing foods*
 - *Caffeine, chocolate, alcohol, peppermint, and fatty foods*
 - *Consider keeping a food journal*
- *Quit smoking*
- *Avoid late meals*
- *Avoid tight fitting clothing*

Take Home Points

- When in doubt, ask for an evaluation.
- Therapy is there to guide and help improve your quality of life.

Resources

- <https://www.myotonic.org>
- <https://www.asha.org/public/speech/disorders/dysarthria/>
- <https://www.asha.org/public/speech/swallowing/Swallowing-Disorders-in-Adults/>

References

- Basil T Darras, MD. (2019, April 15). Myotonic dystrophy: Etiology, clinical features, and diagnosis. Retrieved from <https://www.uptodate.com/contents/myotonic-dystrophy-etiology-clinical-features-and-diagnosis>
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References

- <https://www.asha.org/Practice-Portal/Clinical-Topics/Dysarthria-in-Adults>
- <https://www.asha.org/Practice-Portal/Clinical-Topics/Adult-Dysphagia>
- <https://www.myotonic.org/treatment-dysphagia>
- <https://swallowingdisorderfoundation.com/about/swallowing-disorder-basics>

Thank you!

