

Oral Motor Dysfunction

Recognizing Dysphagia and Aspiration

Tracy Aldridge, MD

Medical Director, Bureau of Clinical
Services Division of Developmental
Disabilities

1

Oral Motor Dysfunction

► Defined

- A dysfunction of the normal mechanism of chewing and swallowing. Can involve abnormal functioning of the mouth, throat, or esophagus.

2

Anatomy of mouth, throat, esophagus, and stomach



ADAM

3

Dysphagia

- ▶ Difficulty in swallowing or inability to swallow.
 - Dysphagia can originate in 2 different areas
 - Oral/pharyngeal (mouth/throat)
 - Esophageal (“food tube” to stomach)

4

Aspiration

- ▶ The entrance of fluid or foreign matter into the air passages of the lungs
 - Often happens due to dysphagia (a difficulty with swallowing)
 - Can happen at any time
 - aspiration of oral secretions
 - Can happen unexpectedly (choking)
 - Food stuffing behavior
 - Vomiting

5

Who is at risk?

- ▶ Dysphagia is due to problems with the normal function of the muscles and nerves involved in one or more of the following phases of swallowing
 - Chewing
 - Propelling food to the back of the throat
 - Action of swallowing
 - Esophagus moving food to stomach

6

Who is at risk?

- ▶ Individuals who have problems with nerves and muscles will be at risk
 - Developmental disabilities
 - Neuromuscular conditions
 - Cerebral palsy
 - GERD (reflux)

7

How can I recognize aspiration or dysphagia?

- ▶ Review of health history specific risks
- ▶ Recognition of mealtime behaviors that may indicate a problem
- ▶ Recognition of signs and symptoms that may indicate an individual has an increased risk

8

Aspiration Risks– Health History

- ▶ Any past diagnosis of aspiration or aspiration pneumonia
- ▶ Individual with a diagnosis of cerebral palsy, muscular dystrophy, epilepsy, GERD, dysphagia, or hiatal hernia
- ▶ Any individual with unexplained weight loss or chronic dehydration



9

Aspiration Risks– Health History

- ▶ Individuals who take medications that may decrease alertness or alter muscle tone
- ▶ People with chronic chest congestion, frequent pneumonia, persistent cough, or chronic use of respiratory medications



10

Aspiration Risks– Mealtime Behaviors

- ▶ Eating slowly
- ▶ Coughing, gagging, or choking during meals
- ▶ Eating in unusual position or posture
- ▶ Unsafe eating/drinking practices (eating/drinking rapidly or food stuffing behavior)
- ▶ Needing to be fed by others



11

Aspiration Risks– Other signs and symptoms

- ▶ Irregular breathing or rapid breathing during or after meals
- ▶ Intermittent fevers
- ▶ Food or fluid falling out of the mouth during meals
- ▶ Vomiting after meals
- ▶ Change in voice during or after meals

12

Consequences of Dysphagia and Aspiration

- ▶ Chronic recurrent aspiration will lead to pneumonia–also known as “Aspiration Pneumonia”
- ▶ The chronic exposure of the lungs to foreign material, as well as recurrent infection, will lead to scarring of lung tissue
- ▶ **THIS DAMAGE IS IRREVERSIBLE**
- ▶ Over time, this will cause chronic lung disease and eventually death.

13

Consequences of Dysphagia and Aspiration

- ▶ **CHOKING**
 - Can be either from food stuffing behaviors or from dysphagia
 - This is serious and can be fatal!
 - All staff should be trained in emergency procedures for any choking episode.



14

Consequences of Dysphagia and Aspiration

- ▶ The key to preventing these complications from dysphagia and aspiration is **RECOGNITION** of the problem and active management of the risk.



15

Risk Assessment for Aspiration and Dysphagia

- ▶ There are several risk assessment tools that can be utilized to help identify individuals who may be at risk for aspiration and dysphagia.
- ▶ Being proactive by identifying those at risk will allow for interventions to be put in place to decrease the chances of complications.
- ▶ Adding a yearly aspiration risk assessment to be completed for all individuals is a helpful tool to identify and manage those at risk.

16

Evaluation and Diagnosis

- ▶ Individuals thought to have signs of dysphagia or aspiration should be evaluated by a healthcare provider.
- ▶ A clear history of the signs observed and the concerns for dysphagia should be presented to the healthcare provider.
- ▶ Swallowing mechanism can only be evaluated by specialized testing.



17

Evaluation and Diagnosis

- ▶ Video Oral Swallow Study (VOSS) is the most common test ordered to evaluate the swallow mechanism.
 - It is generally conducted by a speech language pathologist in conjunction with a radiologist
 - It is a “real time” x-ray of the swallow mechanism
 - Individual is tested with various food and liquid textures
 - Dietary recommendations or restrictions will be given in the final report if there is concern noted on the testing.



18

Diet Modifications for Aspiration and Dysphagia

- ▶ Individuals who are diagnosed with aspiration or dysphagia should have dietary recommendations from the swallow specialist for alterations to their diet consistency.
- ▶ Soft food
- ▶ Pureed food
- ▶ Thickened liquids
- ▶ Severe cases may not be safe to take nutrition by mouth
 - (in these cases an alternative route for nutrition would need to be looked into, i.e., G-tube access)



19

Diet Modifications for Aspiration and Dysphagia

- ▶ BE AWARE that some medications cannot be mixed with food as they will cause a choking hazard.
- ▶ For Example: Bulk forming laxative powders such as Metamucil, Fibercon, and Genfiber **must only be mixed with water or juice.**
- ▶ When mixed with food, they quickly harden and create a choking hazard for individuals

20

Program Planning for Dysphagia

- ▶ Individuals identified as having dysphagia or aspiration should have an individual program plan to address this issue.



21

Program Planning for Dysphagia

- ▶ The program plan should address:
 - Assistance level needed (including verbal or physical cues needed)
 - Correct positioning for oral intake
 - Adaptive feeding equipment
 - Where meals should take place
 - Common signs of aspiration, what to do, where to document, and who to notify if these occur

22

Program Planning for Dysphagia

► For Staff

- Ensure only trained staff assist the individual at mealtime
- Stop assisting with meal if person coughs, chokes or gags. Notify appropriate professional staff before resuming
- Avoid having individual lie down after meals for 30 to 60 minutes

23

Program Planning for Dysphagia

- Staff should be trained on all aspects of the individual's mealtime protocol.
- Staff should be trained on emergency response to an aspiration or choking event.
- Appropriate emergency equipment should be in the room the individual receives meals (face mask for CPR, gloves, etc)



24

Program Planning for Dysphagia

- ▶ Individuals with dysphagia should be re-evaluated **annually** as the level of dysfunction often progresses, requiring modification of the individuals plan.



25

Roles and Responsibilities

- ▶ **Agency**
 - Must ensure all individuals are assessed for aspiration and dysphagia risk
 - Develop a policy for ensuring staff receive appropriate training in mealtime procedure for individuals known to have aspiration or dysphagia
 - Provide staff with appropriate emergency response training to incidents of choking and aspiration



26

Roles and Responsibilities



▶ House Managers/QIDP

- Recognition of relevant health history or patterns of illness that may suggest aspiration or dysphagia
- Ensure individual plans are appropriate to each person who needs a mealtime plan due to risk or presence of aspiration or dysphagia.
- Advocate for individual during healthcare visits if there is concern for aspiration or dysphagia, so that it is addressed appropriately by the healthcare provider.

27

Roles and Responsibilities

▶ Staff

- Report observation of any signs or symptoms of aspiration or dysphagia to supervisor
- Adhere to prescribed mealtime plans developed for all individuals with a risk for or presence of aspiration or dysphagia
- Encourage safe eating habits for all individuals



28

- ▶ Please contact the Bureau of Clinical Services for any concerns or questions regarding recognition or management of aspiration and dysphagia.
 - Division of Developmental Disabilities
 - Bureau of Clinical Services
 - 319 E Madison, Springfield, IL 62701
 - (217) 782-9449