
DYSPHAGIA

People with dysphagia have difficulty swallowing and may experience pain while swallowing (odynophagia). It is most frequently found in older adults and is common in patients with neurological diseases like Parkinson's or Alzheimer's or who have experienced a stroke. Due to the high prevalence of dysphagia, frontline staff must be able to recognize its symptoms and be able to work with patients for treatment.

What Causes Dysphagia?

Dysphagia occurs when there is a problem with the neural control or structures involved in any part of the swallowing process. The muscles and nerves that help move food through the throat and esophagus don't work right. Any condition that weakens or damages the muscles and nerves used for swallowing may cause dysphagia. For example, people with diseases of the nervous system, such as cerebral palsy or Parkinson's disease, often have problems swallowing. Weak tongue or cheek muscles may make it hard to move food around in the mouth for chewing. Additionally, stroke, head injury or other nervous system disorders, such as muscular dystrophy, may weaken or affect the coordination of the swallowing muscles or limit sensation in the mouth and throat. Another difficulty is when weak throat muscles cannot move all of the food toward the stomach, a problem that sometimes occurs after cancer surgery.

Some of the signs of dysphagia include taking a long time to begin to swallow; food leaking from the nose or mouth; coughing or choking on food, fluids or saliva; or a feeling of fullness, tightness or pain in the throat or chest when swallowing.

How Is Dysphagia Diagnosed?

A thorough assessment and testing may be done by:

- An otolaryngologist (a physician who treats the ear, nose and throat)
- A speech-language pathologist (who evaluates and treats swallowing problems)
- A neurologist (a physician who treats problems of the brain, nervous system and spinal cord)

Symptoms of dysphagia

Food or liquids may be aspirated when swallowing or when food is coming up, such as during vomiting or reflux (heartburn). Sometimes a patient aspirates, meaning food or fluid going into the lungs. This can occur when swallowing food, when vomiting or with reflux (heartburn). The lungs recognize the substance as foreign material. This should cause the patient to reflexively cough or gag. If he or she successfully coughs the

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substance out, no airway damage occurs. If the food or liquid remains in the lungs, however, the stage is set for a chemical reaction that may lead to pneumonia or even death.

Frontline staff can help patients by recognizing the many signs and symptoms of dysphagia. They include:

- Difficulty controlling liquids and secretions in the mouth, drooling or food falling out of the mouth
- A wet or gurgly-sounding voice
- A weak voice in combination with other signs or symptoms
- Taking a long time to begin a swallow
- Swallowing several times for a single bite of food
- Food leaking from the mouth or nose
- Frequent throat clearing
- Lack of a gag reflex
- Weak cough before, during or after a swallow
- Coughing or choking on food, fluids or saliva
- Pocketing food
- A feeling of fullness, tightness or pain in the throat or chest when swallowing
- A sensation of food or saliva sticking in the esophagus or sternal area
- Feeling as if a foreign body or “lump” is sticking in the throat
- Drooping appearance of lower face in combination with other signs or symptoms
- Asymmetrical appearance of face in combination with other signs or symptoms
- Spitting food out or refusing to eat
- Recurrent upper respiratory infections or persistent low-grade fever
- Unintentional weight loss
- Signs and symptoms of abnormal or inadequate nutrition or malnutrition

If a patient experiences any of these signs or symptoms, notify the nurse or case manager and physician.

An isolated symptom such as coughing or refusing to eat is likely not a problem. Having a pattern of problems or many signs and symptoms suggests dysphagia. Consultation with a speech-language pathologist is suggested.

Treatment of Dysphagia

There are different treatments for various types of dysphagia. Medical doctors and speech-language pathologists who evaluate and treat swallowing disorders use a variety of tests that allow them to look at the stages of the swallowing process. One test, the flexible endoscopic evaluation of swallowing with sensory testing (FEESST), uses a lighted fiber-optic tube, or endoscope, to view the mouth and throat while examining how the swallowing mechanism responds to stimuli, such as a puff of air, food or liquid. A videofluoroscopic swallow study (VFSS) is a test in which a clinician takes a videotaped X-ray of the entire swallowing process by having a patient consume several foods or liquids along with the mineral barium to improve visibility of the digestive tract. The X-ray helps identify where in the swallowing process the patient is experiencing problems. Speech-language pathologists use this method to explore strategies that will allow a patient to swallow food safely.

Several steps can be taken to assist patients with dysphagia. The patient's food may be changed, either through altering its texture or cutting the food into smaller pieces or liquids can be thickened using a commercial thickener like "Thick it" or by using instant potato flakes or cornstarch hot liquids like soup (this should be ordered by a physician). The patient may adjust his or her head and neck posture or use maneuvers such as chin tucking (which helps ensure food and other substances do not enter the trachea when swallowing). A patient can also perform muscle exercises to strengthen weak facial muscles or improve coordination. If a patient is unable to swallow safely despite rehabilitation strategies, short-term medical or surgical intervention may be necessary as the patient recovers. In progressive conditions such as amyotrophic lateral sclerosis (ALS, or Lou Gehrig's disease), a feeding tube in the stomach may be necessary for the long term.

Speech pathology exercises

Speech-language pathologists usually work with patients in treating dysphagia. The therapist will develop a plan that may include changing food texture to an easily swallowable consistency. He or she will recommend patient-specific techniques for improving swallowing and preventing aspiration. Common approaches are:

- Tucking the chin
- Turning the head
- Avoiding eating when fatigued
- Swallowing twice with each bolus of food
- Strengthening exercises for the muscles used with swallowing

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Your restorative program may involve working with the patient on these exercises, as most patients with dysphagia require one-to-one supervision during meals. The patient's care plan may include the following:

- Making sure the patient is fully awake and alert before beginning a meal.
- Adopting a “So what?” attitude for spills and food messes.
- Positioning the patient upright, providing support if necessary.
- Positioning the head facing forward, with the neck flexed forward slightly. Avoid extending the neck. This technique changes the position of the airway, which is effective for some but not all types of dysphagia. In some patients, it may actually increase the risk of aspiration.
- Minimizing conversation.
- Limiting environmental distractions as much as possible. Focus the patient on eating.
- Cutting the food into small (dime-size) pieces.
- Directing the food to the unaffected side of the mouth if the patient has had a stroke.
- Encouraging the patient to eat slowly, taking small bites.
- Reminding the patient to chew thoroughly.
- Instructing the patient to cough or clear the throat after each bite of food.
- Checking to be sure the mouth is empty before adding more food.
- Using straws with caution. They may cause the patient to drink at an unsafe speed and volume.
- Following the therapist's instructions for tucking the chin during swallowing. For some patients, the head should be slightly down during swallowing. With others, it should be slightly back or turned to one side.
- Instructing the patient to avoid swallowing when the head is tipped back.
- Checking the mouth for food particles after meals and assisting with oral hygiene.
- Monitoring the patient, as swallowing problems often worsen when the patient is tired.

The speech-language pathologist may order other special positions and exercises, depending on the patient's needs. For example, the muscle activity involved in swallowing food is slightly different than in swallowing liquid (the latter is more difficult), and the patient may have difficulty adjusting the swallowing muscles if trying to switch between the two. The therapist may recommend consuming food and fluid separately. For items such as soup, taking in one consistency at a time may work best. If this does not work, serve food with mixed consistency (e.g., soup, cereal with milk) separately. The patient may need to avoid very dry foods entirely. They are difficult to swallow, and crumbs may end up in the airway. Moistening dry foods with gravy or cream-based soup may also help.

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Home health staff's role in effective dysphagia management

The speech-language pathologist may order a particular consistency of food, or a dysphagia diet, to effectively treat a patient with dysphagia. One of the following four diet levels is usually ordered:

- **Level 1:** Dysphagia pureed. Foods in this level are pureed or of similar consistency, cohesive and pudding-like.
- **Level 2:** Dysphagia mechanically altered. Foods in this level are cohesive, moist and semisolid, requiring some chewing ability. They include ground or minced meats as well as fork-mashable fruits and vegetables. Some examples of excluded foods are most bread products, crackers and other dry foods.
- **Level 3:** Dysphagia advanced. Foods in this level are soft-solid and require more chewing ability. They include easy-to-cut meats, fruits and vegetables. Disallowed foods include hard, crunchy fruits and vegetables, as well as foods that are sticky or very dry.
- **Level 4:** Regular. Any solid textures.

Nursing and dietary personnel must work closely with the speech-language pathologist, dietitians and caregivers to ensure altered food remains acceptable to the patient. Attractive food appearance and proper temperature are important. Some patients refuse pureed food, for example, because it resembles baby food. Generally speaking, pureed diets should not be watery or runny. When properly prepared, regular pureed items should be about the consistency of pudding and support a plastic spoon in the upright position.

It is important for staff to understand that the goal of food preparation is to ensure the food:

- Is the proper consistency to meet the patient's needs and reduce the risk of aspiration
- Looks and tastes as close to normal as possible
- Consistency is altered as little as possible; sometimes extra gravies or sauces are all that is needed

The speech-language pathologist will work with the patient, caregivers and nursing staff to teach individualized approaches for eating and drinking. He or she may recommend using food thickeners to slow the movement of food and fluid through the esophagus. Thickeners can alter the consistency of food and liquid to resemble nectar, honey or pudding. Applesauce, soft fruits and instant potatoes may be used to thicken some foods, as can corn starch and gelatin (which will continue their thickening action as the food sits). However, commercial thickeners such as powders work best.

When thickening liquids, keep in mind that the consistency of the liquid depends on the amount of powder added. Additionally, the viscosity (thickness) of a liquid changes as its temperature changes. As the item cools, less thickener is needed so more thickener is needed for hot liquids than for cold liquids. There is a great margin of error in mixing powdered thickeners, so it is important for the staff member to follow the therapist's instructions exactly.

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Dysphagia can be serious. Someone who cannot swallow safely may be unable to eat enough of the right foods to stay healthy or maintain an ideal weight. Dysphagia can also lead to additional major medical problems. You are an important partner in managing each individual's dysphagia symptoms and treatment plan.