Detection, diagnosis and treatment

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INDEED: "Innovative tools for diets oriented to education and health improvement in dysphagia condition"

Project N:2020-1-ES01-KA204-083288

Co-funded by the Erasmus+ Programme of the European Union

Goals of the lesson

The aim of this lesson is to learn early identification of disease, use the screening tools, understand the meaning of professionals involved, learn alert protocol and management of oropharyngeal dysphagia, and improve knowledge about medical and surgical treatment possibilities.

(Source: obtained from Canva Pro)

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Learning outcomes

- To understand the extreme importance of detecting and diagnosing signs of dysphagia.
- To recognize the different diagnostic tests and treatments.
- To apply the knowledge to maintain alert everyday.

(Source: obtained from Canva Pro)

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Ice breaker

Back in the early 1800s, people thought tomatoes had medicinal qualities.
One doctor claimed they could treat diarrhea and indigestion, so he made a recipe for a type of tomato ketchup which then became a pill.

What is your food-medicine?

(Source: https://www.istockphoto.com)

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Dysphagia detection

Signs detection is an essential part of the treatment to dysphagia people. When dysphagia are underestimated, unrecognized (so-called silent dysphagia) or left untreated, they may lead to previous risks mentioned. For this reason, training elderly or most vulnerable people in dysphagia and other swallowing complications is essential to carry out a correct treatment.

Training to detect dysphagia signs, you should follow next steps:

- **Keep a close eye on:** Control your state of health: weight variations, fatigue, food rejection, swallowing difficulty and other problems. They may indicate a health problem.
- **Get inform:** request information from the health professionals of your health center or disability association.
- **Detect:** Identify the usual signs of dysphagia and how often they appear.
- **Act:** Inform the reference health professional. Follow the specialist's instructions regarding posture, diet and other relevant habits.

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Dysphagia diagnosis

The evaluation of dysphagia requires the collection of detailed information by doctors and speech therapists. This information should be provided by the patient or their family/caregiver. Evaluation makes it possible to define the cause of dysphagia in 80-85% of the cases.

The main objective of the diagnostic program is to evaluate two characteristics:

- **Safety**

  It refers to the ability to transfer the bolus from the mouth to the stomach without penetration or aspiration into the lower airways.

- **Efficacy**

  It refers to the ability to intake the whole amount of calories and fluids needed to fully cover one's personal daily energy and water requirements.

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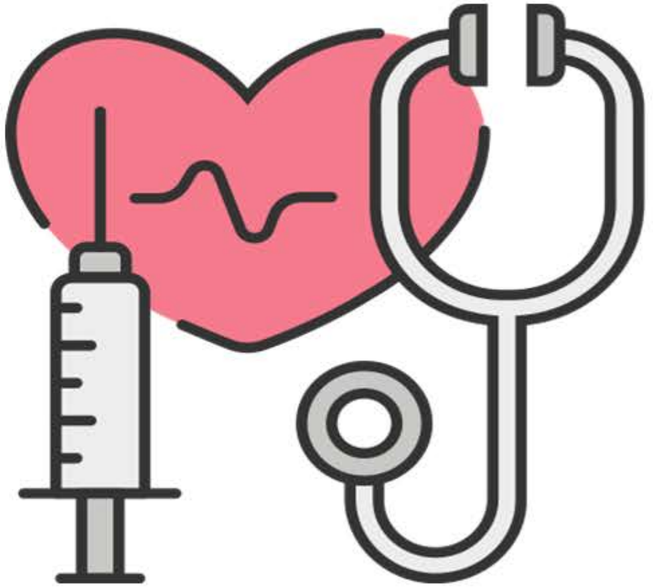
Dysphagia screening tools

The diagnostic program for dysphagia should be carried out by complementary clinical and instrumental methods.

- Medical history
- Clinical examination
- Instrumental assessment



(Source: obtained from Canva Pro)

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Dysphagia screening tools

Medical history

Elaborating a meticulous clinical history allows to determine, in 80% of cases, the location of the problem, differentiating whether it is an oropharyngeal or esophageal dysphagia, it causes and establish correct diagnosis.

The performance of a differential diagnosis makes it possible to differentiate dysphagia from other clinical pictures such as Presbyphagia or Odynophagia.

(Source: obtained from Canva Pro)

Questionnaires such as EAT-10 (Eating Assessment Tool) are screening tests to identify those individuals at increased risk for clinical signs of dysphagia. They should be thoroughly evaluate and results should be include in medical history.

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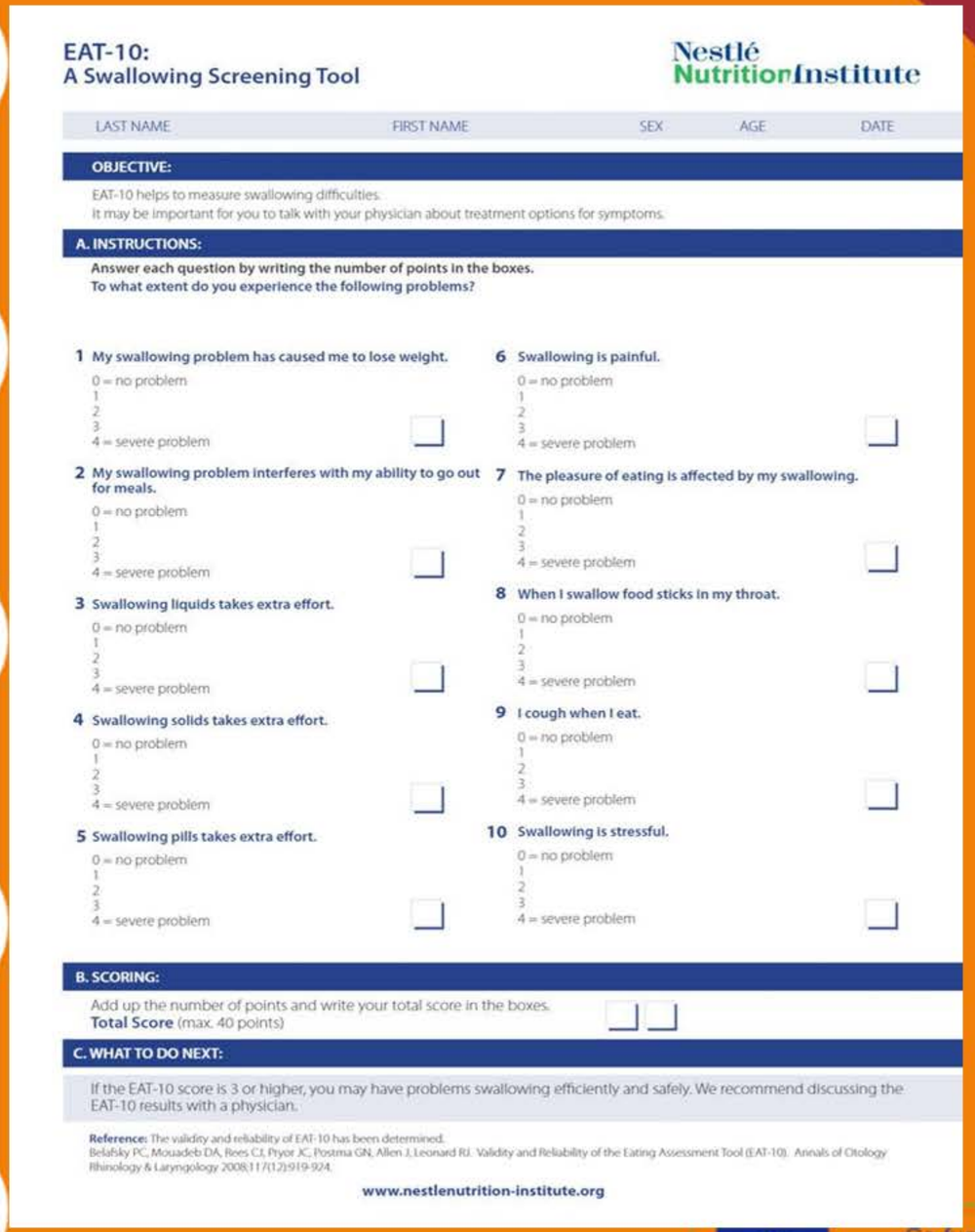
Dysphagia screening tools

EAT-10 (Eating Assessment Tool) is a simple and internationally validated questionnaire (press here to open).

It consists of 10 questions to be answered on a scale of values from 0 (no problem) to 4 (serious problem).
This tool can be completed by the patient and/or caregiver and is quick to complete (3-5 minutes).
If the score is higher than 3, it indicates that the person has oropharyngeal dysfunction.
It is not a valid instrument for the diagnosis of dysphagia.



EAT-10:
A Swallowing Screening Tool

Nestlé NutritionInstitute

LAST NAME | FIRST NAME | SEX | AGE | DATE

OBJECTIVE:

EAT-10 helps to measure swallowing difficulties.
It may be important for you to talk with your physician about treatment options for symptoms.

A. INSTRUCTIONS:

Answer each question by writing the number of points in the boxes.
To what extent do you experience the following problems?

1 My swallowing problem has caused me to lose weight.
0 = no problem
1
2
3
4 = severe problem

2 My swallowing problem interferes with my ability to go out for meals.
0 = no problem
1
2
3
4 = severe problem

3 Swallowing liquids takes extra effort.
0 = no problem
1
2
3
4 = severe problem

4 Swallowing solids takes extra effort.
0 = no problem
1
2
3
4 = severe problem

5 Swallowing pills takes extra effort.
0 = no problem
1
2
3
4 = severe problem

6 Swallowing is painful.
0 = no problem
1
2
3
4 = severe problem

7 The pleasure of eating is affected by my swallowing.
0 = no problem
1
2
3
4 = severe problem

8 When I swallow food sticks in my throat.
0 = no problem
1
2
3
4 = severe problem

9 I cough when I eat.
0 = no problem
1
2
3
4 = severe problem

10 Swallowing is stressful.
0 = no problem
1
2
3
4 = severe problem

B. SCORING:

Add up the number of points and write your total score in the boxes.
Total Score (max. 40 points)

C. WHAT TO DO NEXT:

If the EAT-10 score is 3 or higher, you may have problems swallowing efficiently and safely. We recommend discussing the EAT-10 results with a physician.

Reference: The validity and reliability of EAT-10 has been determined.
Belafsky PC, Mouadeb DA, Rees CJ, Pryor JC, Postma GN, Allen J, Leonard RJ. Validity and Reliability of the Eating Assessment Tool (EAT-10). Annals of Otology Rhinology & Laryngology 2008;117(12):919-924.

www.nestlenutrition-institute.org

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Dysphagia screening tools

Clinical examination

Clinical examination is a set of procedures performed by a trained speech-language pathologist, whose purpose is to obtain further clinical information that confirms the diagnostic orientation provided by the medical history.

Clinical information: datas whatever form, type or kind that allows acquiring or extending knowledge about the physical and health condition of a person to preserve, care for, improve or recover it.

The main objective of clinical examination in dysphagia is to provide the clinician information on the existing deficits, neuromuscular processes involved in swallowing and their modifications. In this way, hypotheses about the pathophysiological mechanisms responsible for the disorder can be put forward and select the optimal diagnostic and treatment techniques.

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Dysphagia screening tools

Main clinical explorations:

- **Face, trunk and cervical observation.** Paying attention to facial gestures, neck, posture and head position.
- **Oral cavity exploration.** Observation of the oral anatomy and physiology: ability to open the mouth, labial, lingual movements in all axes of space, mandibular and cheek movements active and against resistance. Presence or accumulation of residues or saliva, alteration of the chewing capacity, state of teeth and any alteration of the anatomy or physiology of the same.
- **Pharyngolaryngeal motor and sensory examination.** Assessment of laryngeal mobility, presence of secretions, glottic function and voluntary cough. The latter is a sign of laryngeal protection against aspiration. People with cervical tracheostomy scar will be explored to ensure that there are no adhesions that limit the mobility of the larynx.
- **Cognitive status assessment.** Evaluation of limb mobility, posture, tone, coordination, osteotendinous reflexes and superficial and deep sensitivity. The detection of abnormal movements, dystonia or archaic reflexes (sucking and biting) allows planning the most appropriate guidelines for treatment based on their active collaboration and understanding.

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Dysphagia screening tools

Main clinical explorations:

Neurological examination of the cranial nerves. Nerves containing motor and sensory fibers. They control the symmetry of the lips, face, protrusion, mobility and strength of the tongue, symmetry of the uvula and palate, oral and oropharyngeal sensitivity, the ability to manage secretions and the ability to cough voluntarily. The assessment of these movements will be done by verbal request, repetition or performance of bucco linguo facial praxias.

Exploration of gag reflex, swallowing and cough reflex. Provocation of gagging, swallowing and coughing to assess responsiveness to a complication during feeding, ensuring the safety and efficacy of the process.

Exploration of swallowing by phases. It aims to locate alterations in the movements and sensitivities of the structures involved in each phase of the swallowing process (oral preparatory phase, oral propulsive phase and pharyngeal phase). Different methods have been developed based on the administration of boluses of different viscosity and volume. These tests can only be recommended and performed by qualified and experienced healthcare personnel, mainly doctors, speech therapists and nurses. The most famous and widely used is the MECV-V because it is a safe and validated method, although it exists others.

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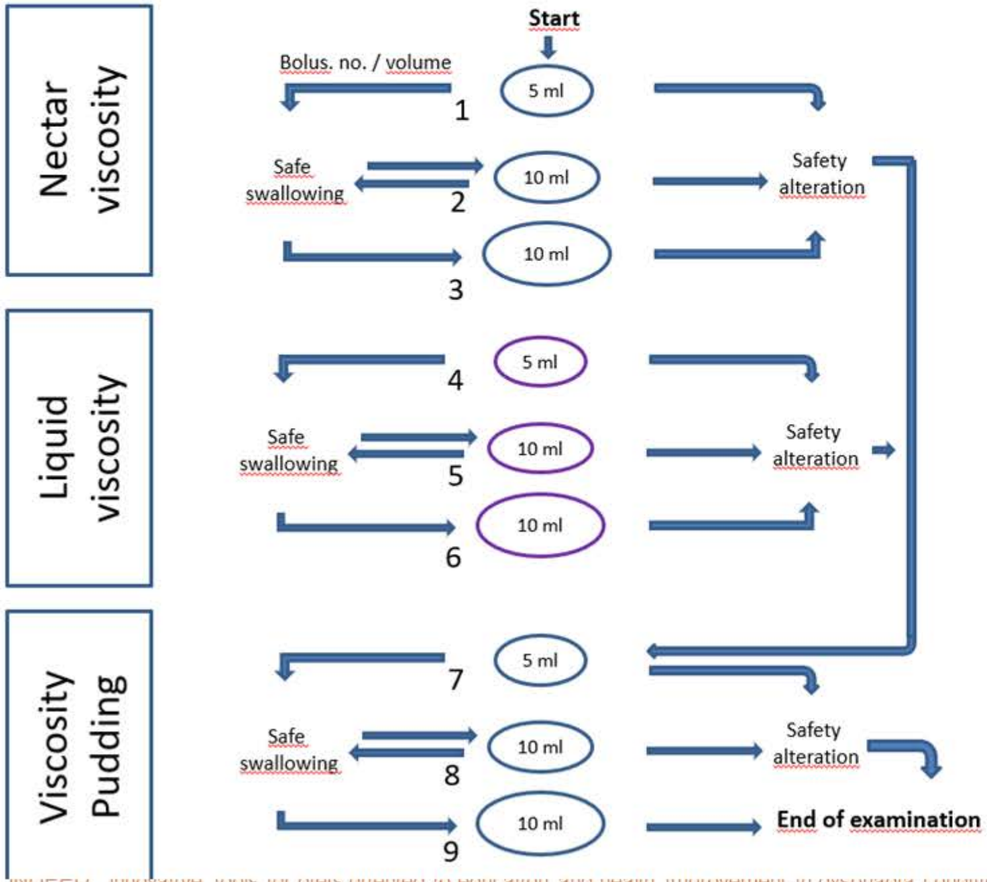
Phased swallowing screening test

MECV-V (clinical examination method volume-viscosity)



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GUSS (Gugging Swallowing Screen)

Name:_____
Date:_____
Time:_____

GUSS
(Gugging Swallowing Screen)

1. Preliminary Investigation /Indirect Swallowing Test

	YES	NO
Vigilance *(The patient must be alert for at least for 15 minutes)*	1 ☐	0 ☐
Cough and/or throat clearing *(voluntary cough)* *(Patient should cough or clear his or her throat twice)*	1 ☐	0 ☐
Saliva Swallow:	1 ☐	0 ☐
• Swallowing successful		
• Drooling	0 ☐	1 ☐
• Voice change (hoarse, gurgly, coated, weak)	0 ☐	1 ☐
SUM:	(5)	
	1 - 4= Investigate further* 5= Continue with part 2	

2. Direct Swallowing Test (Material: Aqua bi, flat teaspoon, food thickener, bread)

In the following order:	1 →	2 →	3 →
	SEMISOLID*	LIQUID**	SOLID ***
DEGLUTITION:			
▪ Swallowing not possible	0 ☐	0 ☐	0 ☐
▪ Swallowing delayed (> 2 sec.) (Solid textures > 10 sec.)	1 ☐	1 ☐	1 ☐
▪ Swallowing successful	2 ☐	2 ☐	2 ☐
COUGH (involuntary): *(before, during or after swallowing – until 3 minutes later)*			
▪ Yes	0 ☐	0 ☐	0 ☐
▪ No	1 ☐	1 ☐	1 ☐
DROOLING:			
▪ Yes	0 ☐	0 ☐	0 ☐
▪ No	1 ☐	1 ☐	1 ☐
VOICE CHANGE: *(listen to the voice before and after swallowing - Patient should speak „O")*			
▪ Yes	0 ☐	0 ☐	0 ☐
▪ No	1 ☐	1 ☐	1 ☐
SUM:	(5)	(5)	(5)
	1 - 4= Investigate further* 5= Continue Liquid	1 - 4= Investigate further* 5= Continue Solid	1 - 4= Investigate further* 5= Normal

SUM: (Indirect Swallowing Test AND Direct Swallowing Test) _____ (20)

*	First administer ½ up to a half teaspoon Aqua bi with food thickener (pudding-like consistency). If there are no symptoms apply 3 to 5 teaspoons. Assess after the 5th spoonful.
**	3, 5, 10, 20 ml Aqua bi - if there are no symptoms continue with 50 ml Aqua bi (Daniels et al. 2000; Gottlieb et al. 1996) Assess and stop the investigation when one of the criteria is observed!
***	Clinical: dry bread; FEES: dry bread which is dipped in coloured liquid
*	Use functional investigations such as Videofluoroscopic Evaluation of Swallowing (VFES) , Fiberoptic Endoscopic Evalutation of Swallowing (FEES)

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Dysphagia screening tools

Instrumental assessment

The instrumental assessment looks at functional and structural aspects of swallowing that aren't visible upon physical examination. It can answer specific questions about the presence and extent of swallow dysfunction, safety for feeding, and the effectiveness of therapeutic strategies. Health care professionals in most hospitals understand the need for instrumental swallowing assessments. For physicians concerned about further testing, I discuss all the benefits of the information they provide, such as identifying the "why" behind the feeding and swallowing problem and determining effective strategies for safe feeding.

(Source: obtained from Canva Pro)

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Dysphagia screening tools

Main instrumental assessment:

Videofluoroscopic swallow study (VFSS).

A videofluoroscopic swallow study (VFSS), also known as a modified barium swallow, is a dynamic x-ray examination of the oral cavity, pharynx, and cervical esophagus.

VFSS permits evaluation of the patient's swallowing function through the administration of liquids and solids of varying consistencies to assess swallowing fluoroscopically.

[[File:Verzoegerte Schluckreflextriggerung 87M - RF - 011.jpg|Verzoegerte Schluckreflextriggerung 87M - RF - 011]]

VIDEOFLUOROSCOPIC SWALLOW STUDY	
Advantages	**Disadvantages**
Visualizes swallowing during bolus passage through the oral, pharyngeal and esophageal phases of swallowing.	Limited duration of exam with infants/children due to radiation exposure.
Defines anatomy and physiology of the swallowing mechanism during swallowing, including bolus formation in oral cavity/transfer in oral cavity, velopharyngeal function, laryngeal excursion, pharyngeal motility, residue, presence and timing of aspiration, response to aspiration.	Requires transport to radiology suite; equipment limits positioning options in the fluoroscopy suite.
Identifies bolus and positioning variables in feeding strategies or maneuvers that enhance swallowing safety.	Barium can alter taste and texture of liquid/food.

Dysphagia screening tools

Main instrumental assessment:

- **Fiberoptic endoscopic evaluation of swallowing (FEES).**

  FEES uses a transnasal endoscope to view the upper aerodigestive tract during swallowing, providing information specific to the pharyngeal phase of swallowing.

FIBEROPTIC ENDOSCOPIC EVALUATION OF SWALLOWING	
Advantages	**Disadvantages**
No radiation exposure to limit test length, allowing a full feeding to be assessed.	Patient discomfort during scope insertion.
Direct view of laryngeal and pharyngeal structures and function during swallowing: vocal fold mobility and airway protection, velopharyngeal insufficiency, normal and abnormal anatomy of pharynx and larynx.	No direct assessment of oral and esophageal phase of swallowing (can assess pharyngeal and laryngeal structures only before and after the swallow); limited view of pharyngeal phase during the swallow with a period of "white out."
Completed at the bedside with positioning in typical feeding position with actual food and liquid.	Fast successive swallows in infants can make images difficult to interpret.
Can assess secretion management.	
Can assess infant swallow function during breastfeeding.	

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Dysphagia screening tools

(Source: obtained from Canva Pro)

Main instrumental assessment:

- **Cervical auscultation (CA).**
  It is the use of a listening device, typically a stethoscope in clinical practice, to assess swallow sounds and by some definitions airway sounds. Judgments are then made on the normality or degree of impairment of the sounds.

- **24-hour pH impedance testing.**
  It is one method your doctor can use to evaluate acid and nonacid reflux from your stomach into your esophagus (the passageway between your mouth and stomach) over the course of a day.
  A thin, noodle-like, flexible catheter (tube) inserted into your nose, and guided into the opening of your stomach. The catheter can pick up changes in acidity along its entire length. The catheter conveys information about your acid reflux activity to a computer about the size of a smartphone that you wear on a belt.

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Importance of correct treatment in dysphagia

Study of swallowing should be performed by specialized and trained health professional using specific tools. It allows not only the diagnosis of dysphagia, but also to determine the most appropriate treatment to promote correct oral feeding, reduce the presence of nutritional and respiratory complications as well as the risk of morbidity and mortality, improving the quality of life.

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PROFESSIONALS INVOLVED

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Dysphagia Team

- Individuals with dysphagia (feeding and swallowing disorders) may have a range of medical issues that require evaluation and treatment in a variety of settings (e.g., school, home, hospital, skilled nursing facility).

- Dysphagia causes and consequences cut across traditional professional boundaries and may necessitate the collaboration of many medical or therapeutic specialists. Feeding and swallowing involve the mouth, throat, upper airway, larynx, trachea, esophagus, and stomach.

- A multidisciplinary or interdisciplinary team of specialists is best suited to manage people with complicated challenges. To obtain the greatest outcome, these specialists collaborate with one another as well as the patient/student and family.

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The Coordinator

- A coordinator, who is typically a Speech-Language Pathologist, leads the dysphagia team.
- Identifies core team members and support services; facilitates team communication; maintains team focus, communication, and engagement.
- Documents team activities; and using appropriate consultation procedures with other team members and other services.

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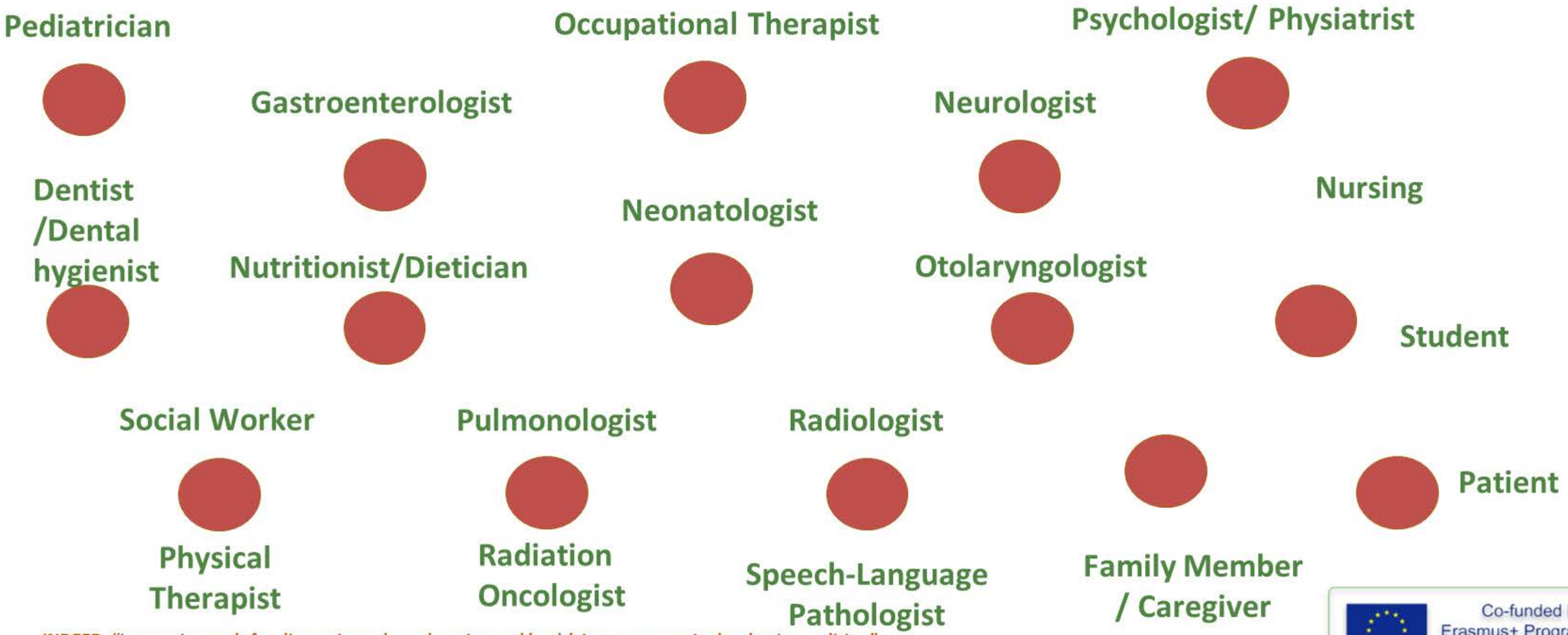
Dysphagia Team



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Dysphagia Team

Dentist /Dental Hygienist

Evaluates and treats gingival and dental dysfunction, and may specialize in prosthetics to improve swallowing. Advice on oral hygiene

Gastroenterologist

Determines any difficulties with the GI tract; performs diagnostic tests related to the esophageal segment of swallowing; and places feeding tubes if the patient/student needs an alternative to oral feeding.

Neonatologist

Identifies infants with swallowing difficulties, refers them for evaluation, orders appropriate therapies, and monitors their progress.

Neurologist

Diagnoses and treats neurological causes of swallowing problems.

(Source: https://www.istockphoto.com)

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(Source: https://www.istockphoto.com)

Nursing

Works with the patient/student and caregivers in implementing and maintaining safe swallowing techniques and compensatory or facilitation strategies during meals and when taking medications.

(Source: https://www.istockphoto.com)

Nutritionist/Dietician

Evaluates nutritional needs; follows therapy recommendations regarding consistencies of liquids and solid foods, determines needs for special diets; and ensures adequate nutrition when using alternative means of nutrition.

(Source: https://www.istockphoto.com)

Occupational therapist

Evaluates and treats sensory and motor impairments and assesses prosthetic needs related to self-feeding and swallowing.

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Otolaryngologist

Diagnoses and treats oral, pharyngeal, laryngeal and tracheal pathologies that may cause or contribute to swallowing problems; cooperates with speech-language pathologist in performing endoscopic evaluations of swallowing.

(Source: https://www.istockphoto.com)

(Source: https://www.istockphoto.com)

Pediatrician

Identifies children with swallowing challenges, provides appropriate referrals, and integrates the dysphagia team's recommendations with the child's general health and well-being.

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(Source: https://www.istockphoto.com)

Psychologist/ Psychiatrist

Evaluates and treats patient/students and their families in adjusting to dysphagia disability, in coping with ramifications of swallowing disorders, and in managing associated stresses.

Physical Therapist

Evaluates and treats body positioning, sensory and motor movements necessary for safe and efficient swallowing, recommends appropriate seating equipment needed during feeding.

(Source: https://www.istockphoto.com)

(Source: https://www.istockphoto.com)

Social Worker

Assists and counsels patient/student and families in adjustment to disability, access to the least restrictive residential and treatment environments, and third-party payment issues.

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Pulmonologist

Evaluates and resolves respiratory issues in dysphagia patients/students; controls chronic pulmonary diseases and ventilator-dependent patients/students.

(Source: https://www.istockphoto.com)

(Source: https://www.istockphoto.com)

Radiation Oncologist

Implements radiation treatment regimens to treat patients/students with dysphagia caused by malignancies of the mouth, throat, and/or esophagus.

Radiologist

Evaluates swallowing problems through radiologic studies, primarily with Speech-Language Pathologists during videofluorographic swallow studies (VFSS.)

(Source: https://www.istockphoto.com)

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Patient / Student

Provides information to other team members about his/her disorder; demonstrates understanding of the causes and treatment of the dysphagia disorder; follows dietary, compensatory and facilitative techniques to restore swallowing function and maintain adequate nutrition and hydration.

(Source: https://www.istockphoto.com)

Family Member / Caregiver

Provides information to other team members about the patient/student's signs and symptoms of the disorder; demonstrates understanding and implements the recommended management techniques.

(Source: https://www.istockphoto.com)

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Speech-Language Pathologist

Evaluates and treats patients/students with swallowing problems, including direct modifications of physiologic responses and indirect approaches such as diet modification.

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ALERT PROTOCOL

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Why is the alert protocol necessary?

According to studies conducted by the European Group for the Study of Dysphagia:

- up to 36% of patients diagnosed with dysphagia report avoiding dining with others, resulting in increased social isolation
- Since their diagnosis, 41% report an increase in anxiety before eating
- 55% believe their quality of life has deteriorated.

All of this leads to a rise in dependency, as well as a greater weight of personal and medical care and institutionalization.

(Source: https://www.istockphoto.com)

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When dysphagia is suspected, what should you do and who should you see?

Dysphagia symptoms might emerge immediately after eating or drinking something in 15-20 minutes. One or more of these indicators must be recognized and identified repeatedly in in the diagnosis period.

In the event that indications of dysphagia are detected or suspected, the alert protocol will be the following steps:

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- Inform your primary care physician. This professional is in charge of performing a preliminary assessment of the symptoms and assessing whether or not the patient is at risk of developing this condition. He is also in responsibility of referring patients to the appropriate specialist within the HEALTH system if he notices any indicators or has a strong suspicion.

(Source: https://www.istockphoto.com)

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- The entity's or association's health personnel should be noticed whether it has a health service or not. The center must inform doctors, nurses, and speech therapists, who will carry out the center's action protocol for dysphagia screening, detection, diagnosis, and treatment.

(Source: https://www.istockphoto.com)

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- It is vitally important to follow the instructions given by health professionals.
These will be in charge of solving all your doubts, questions and providing you with the real and truthful information you need. In case of not being able to answer the questions posed, they are also the best qualified to refer you to another health professional who can.
Searching for information on the internet or social networks is discouraged at all times, as it may not be truthful and may even be dangerous to the health of the person. After the diagnosis, periodic evaluations will be carried out to guarantee that feeding is a safe and effective process, since as the pathology that causes dysphagia progresses, so does the symptom.

(Source: https://www.istockphoto.com)

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ALERT PROTOCOLS FOR DYSPHAGIA IN CENTERS

When a professional receives a warning for suspected dysphagia alarm sign (s), they must follow the steps below:

(Source: obtained from Canva Pro)

- The professional will be present during the takings (food-drink) for the next three days in the center to determine if the alert specified is present.
- Professionals and family members involved in the person's feeding will be notified of the presence of these symptoms by the reference figure. It will also serve as a reminder of the most common warning indicators.
- The Professional will make a note in the center's incident book so that the entire team is aware of the situation. Within the next five days, professionals provide confirmation of supervision.

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If no repeat signs or symptoms of dysphagia are discovered in the next 5 days, the feedings will be monitored as usual.

Depending on whether or not a specialized professional is present in the center, proceed as follows if one or more indicators of dysphagia are discovered during the surveillance period.

(Source: https://www.istockphoto.com)

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Without specialized professionals to perform texture assessment tests in the center

Referral to a family doctor through the family or the center for professional examination and texture / thickening instructions

Use textures (solid and liquid) with a lower level of texture than usual until the test is completed.

(Source: https://www.istockphoto.com)

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With specialized professionals to perform texture assessment tests in the center

- Analyzing the situation and deciding on the test to perform
- Develop rules for texture and thickening
- Inform the center's professionals and family about the new dietary guidelines that have been created.
- Include it in the incident book so that everyone on the team is aware of it.
- Modify the user's clinical / nutritional file as well as the explanatory food documents.

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MANAGEMENT OF OROPHARYNGEAL DYSPHAGIA

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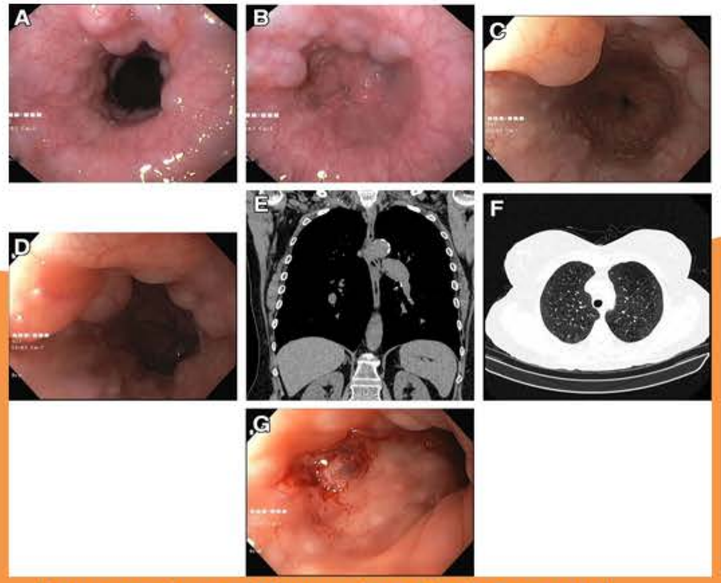
Management strategy

Dysphagia sufferers should be identified as soon as possible.

Diagnosis of any medical or surgical conditions that may benefit from certain treatments.



(Source: https://www.istockphoto.com)

Therapeutic measures are devised to ensure safe and effective deglutition and proper nutrition.

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Preterm infants in dysphagia management

Early detection of high-risk preterm infants is critical.

(Source: https://www.istockphoto.com)

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Management of dysphagia in elderly patients

Dysphagia management is a collaborative effort. Many professions may be involved in the treatment of a patient's dysphagia symptoms.

(Source: https://www.istockphoto.com)

(Source: https://www.istockphoto.com)

To enhance deficient swallowing functions in elderly people, more direct and intensive rehabilitation treatments are required.

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MEDICAL AND SURGICAL TREATMENT OF DYSPHAGIA

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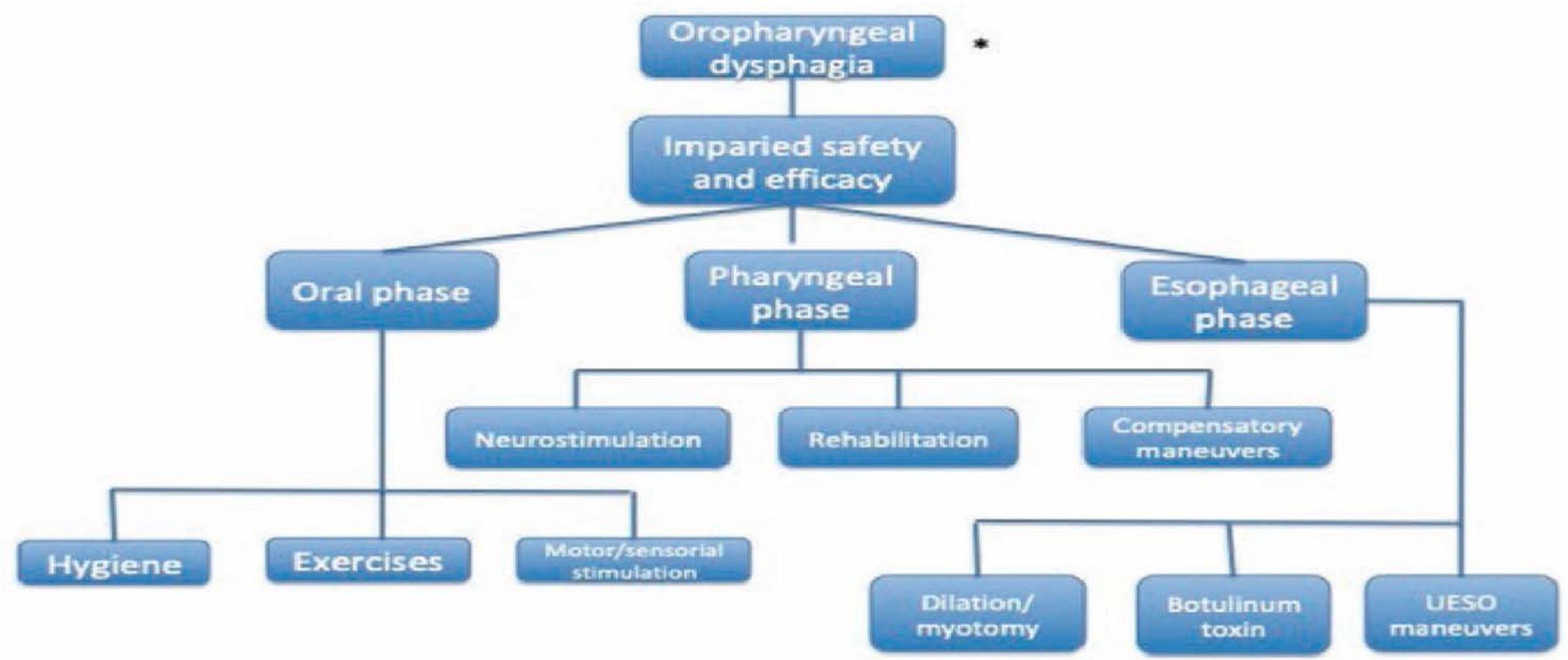
Algorithm for oropharyngeal dysphagia treatment



- Specific treatment according to etiology, for example: CVD, Parkinson's disease
- UESO: upper esophageal sphincter opening

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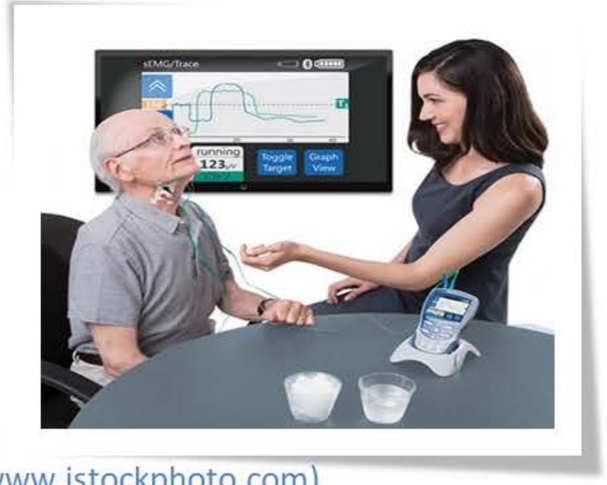
Oral phase

Hygiene;

For dysphagia patients, oral care entails not just cleaning the mouth, but also avoiding aspiration pneumonia, which can be fatal.

Motor/sensorial stimulation;

Castillo Morales' orofacial regulation therapy, which combines body and orofacial management with the insertion of a palatal plate, has shown encouraging outcomes in dysphagia patients.



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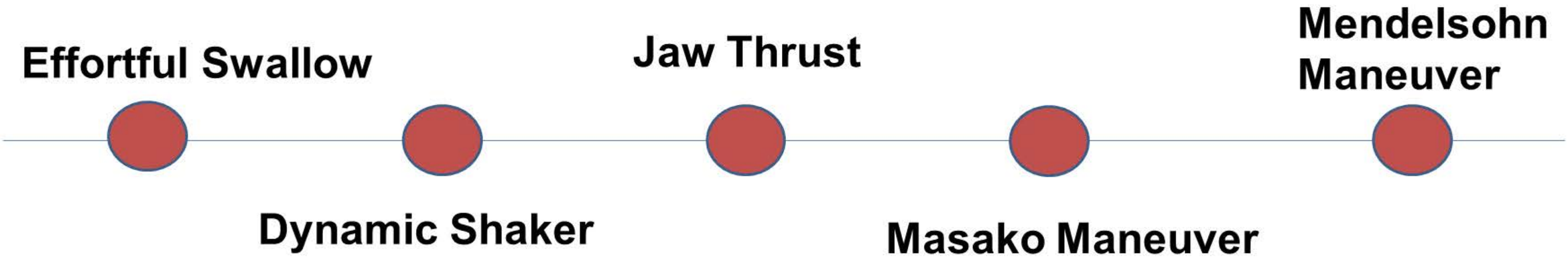
Exercises

Dysphagia patients should begin with exercises like the ones described below, under the supervision of a medical expert such as a speech-language pathologist or an occupational therapist (see Lesson 3.2).



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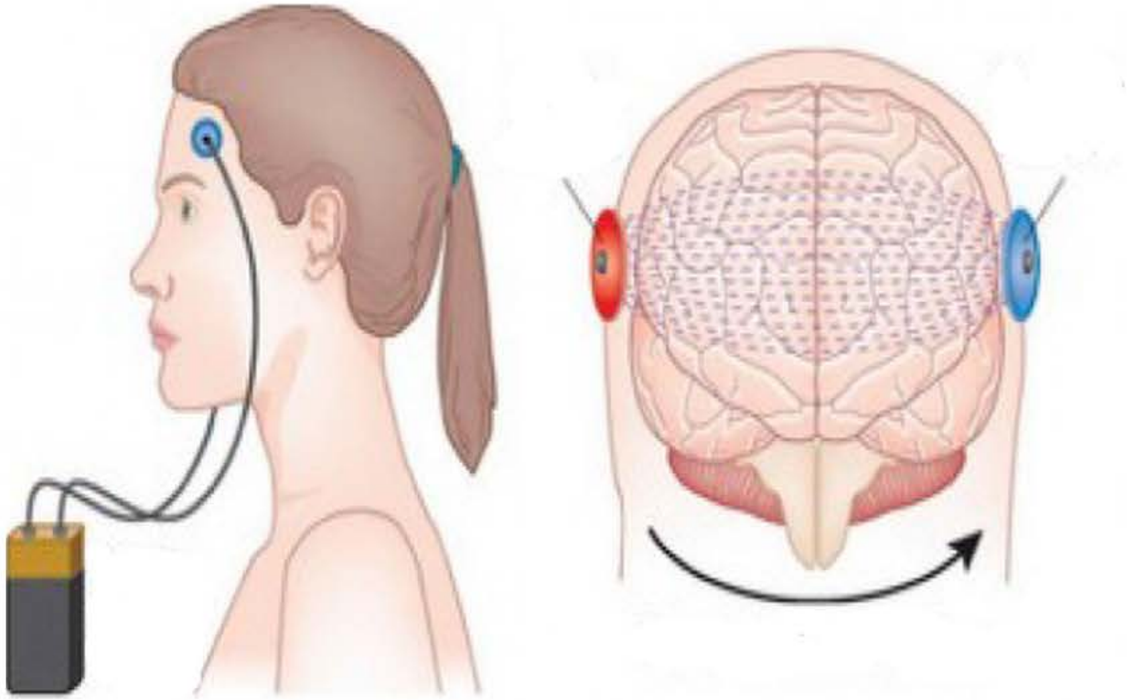
Pharyngeal phase

Neurostimulation

Neuromuscular electrical stimulation (NMES) is a type of transcutaneous stimulation that activates sensory or motor nerve fibers involved in swallowing.

This mechanism of action is thought to include increasing central nervous system recuperation and speeding up the development of muscle strength.



(Source: obtained from Canva Pro)

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Rehabilitation

Exercises for swallowing rehabilitation are designed to target certain muscles or muscle groups.

Much of today's treatment focuses solely on strength, with little evidence-based studies demonstrating the therapeutic benefits of therapeutic exercises.

(Source: https://www.istockphoto.com)

Compensatory maneuvers

When compensatory techniques are adopted, they alter the swallow but do not result in long-term functional changes.

A head rotation, which is utilized during the swallow to steer the bolus toward one of the lateral channels of the pharyngeal canal, is an example of a compensating method.

(Source: https://www.istockphoto.com)

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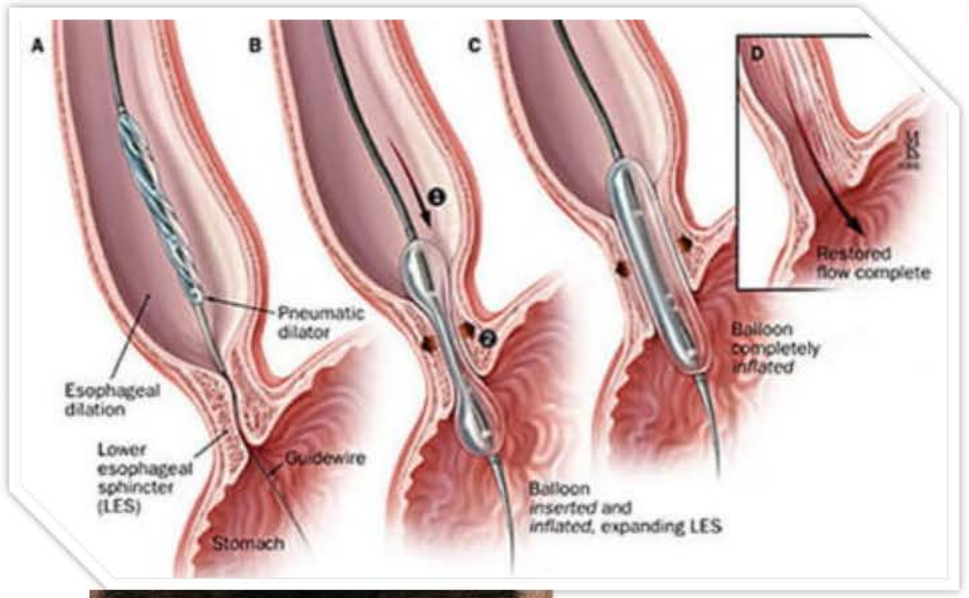
Esophageal phase

Dilation/myotomy

Myotomy can be done through the skin or with an endoscope.
Hemorrhage, recurrent laryngeal nerve damage, and pharyngeal or esophageal fistulization are all complications of myotomy.



Botolinium toxin;

In individuals with OD, BoTox injection might be utilized as the first treatment option.
It is simple and safe, and it relieves dysphagia in 43% of instances. Patients with preserved mouth and tongue activity at VFS and intact bolus propulsion capacity on manometry can be offered CP myotomy if BoTox fails.

(Source: https://www.istockphoto.com)

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Surgical treatment of OD

Surgery may be indicated to treat esophageal cancer or to improve swallowing problems caused by throat narrowing or obstructions, such as bony outgrowths, vocal cord paralysis, pharyngoesophageal diverticulum, GERD, and achalasia.
Following surgery, speech and swallowing treatment is frequently beneficial.

(Source: https://www.istockphoto.com)

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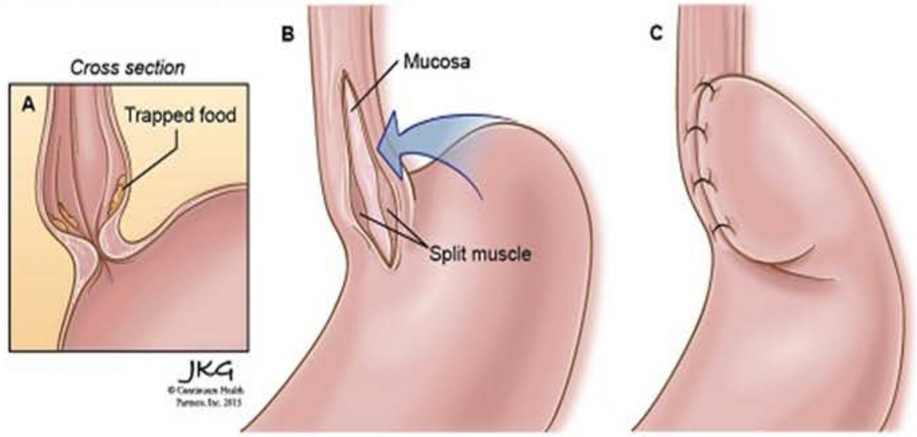
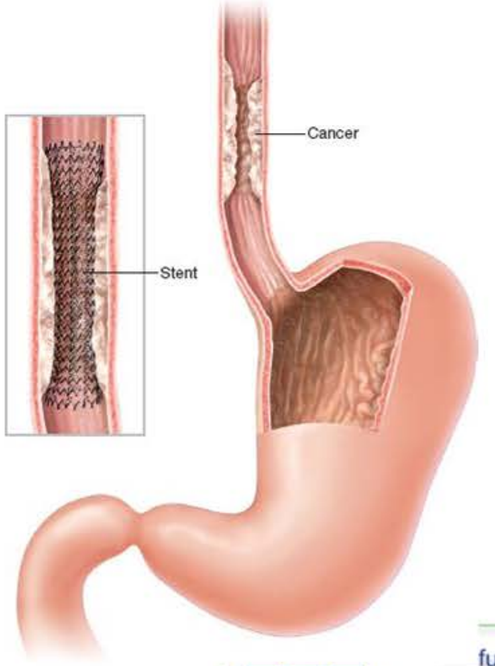
The type of surgical treatment depends on the cause for dysphagia. Some examples are:

Laparoscopic Heller myotomy - when the muscle at the lower end of the esophagus (sphincter) fails to open and release food into the stomach in persons with achalasia, this procedure is used to sever it.



Peroral endoscopic myotomy (POEM) - an endoscope is put into your mouth and down your throat by the surgeon to make an incision in the lining of your esophagus. The surgeon next cuts the muscle at the lower end of the esophageal sphincter, similar to a Heller myotomy.

Stent placement - a metal or plastic tube (stent) can also be inserted by your doctor to prop open a narrowing or obstruction in your esophagus. Some stents are permanent, such as those for esophageal cancer patients, while others are temporary and removed later.



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Time for discussion

Any questions?

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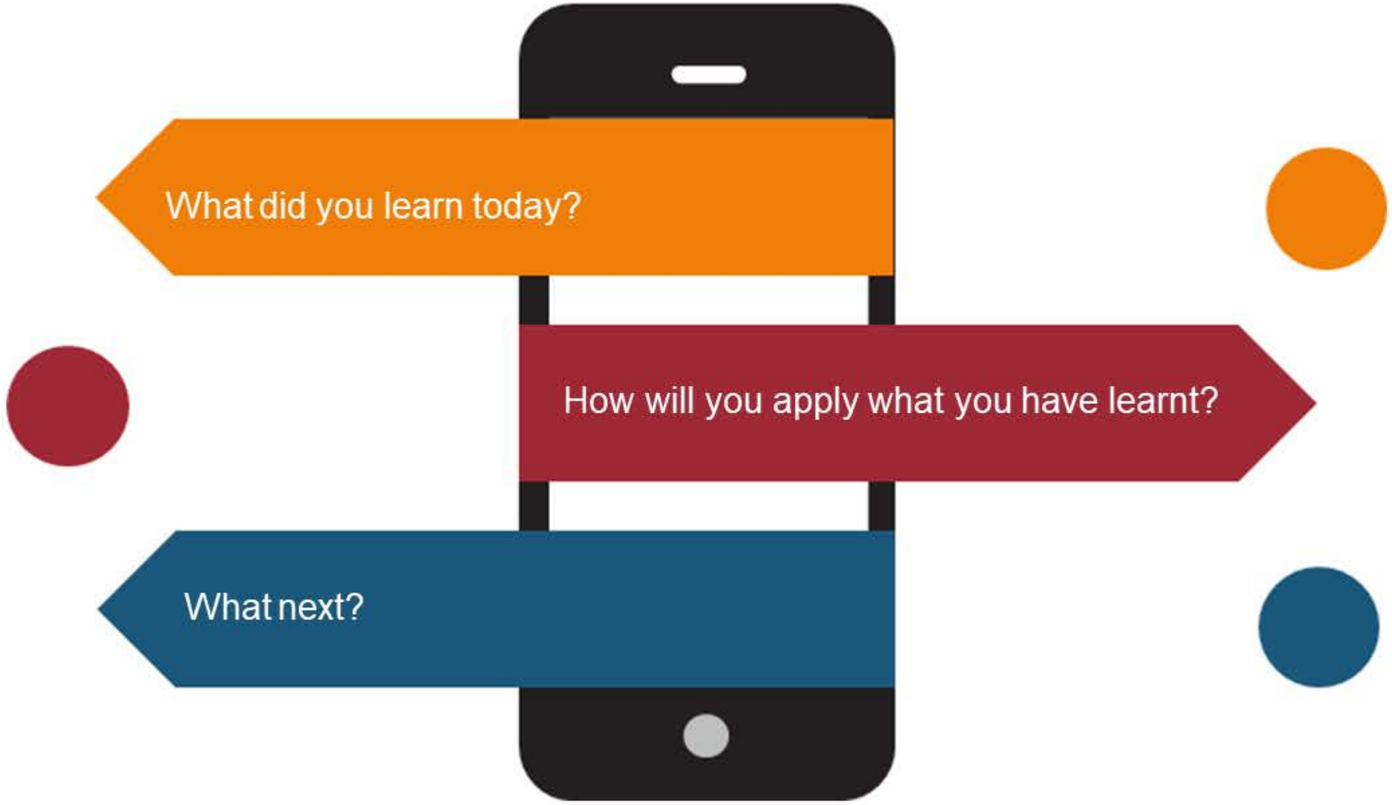
Reflect on the session



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Feedback

How many stars would you give this workshop

(1 to 5)?

What reasonable change would you recommend?

What did you like the MOST?

What did you like the LEAST?

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To Know More

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