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Speech & Language Specialist

Module 42: Other communication disorders

Within this course of study in speech and language therapy, you should have, up to this point, gained a broad understanding about the basic principles of communication, specifically regarding disorders of speech and language. From the anatomical, physiological, and scientific details about the human body, the nature of speech and sound, and the development of literacy, your understanding of the work that speech and language pathologists perform in helping clients with communication disorders should be significantly expanded.

The speech and language therapist's role in rehabilitation is vast and varied, reaching far beyond the aforementioned practices of helping patients with the physical malformations of speech and language mechanisms. Speech and language therapists work closely with patients who suffer debilitating diseases and disorders that affect functioning in their brain. Therefore, this module will combine what we covered about the neurological functioning of different areas of the human brain.

We will cover areas such as how suffering a stroke, traumatic brain injury, or acquiring a debilitating disorder, commonly associated with old age and deterioration of the mind and body can affect a person's communication abilities. People with attention and memory issues and disorders, individuals who suffer from problem solving and issues with executive functioning, as well as the challenging issues associated with swallowing disorders will be explored. The completion of this course module will complete your study of an introduction to speech and language therapists, thus preparing you for future opportunities for further, more in depth study in the field.

What you'll learn in this module:

42.1 Attention disorders

42.2 Memory disorders

42.3 Cognitive disorders

42.4 Swallowing disorders

42.1 Attention disorders



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ADD and ADHD, or Attention Deficit Disorder and Attention Deficit Hyperactivity Disorder, are the most well-known and commonly diagnosed attention disorders. In and of themselves these disorders are not labeled as speech and language issues; however, the correlation between having ADD or ADHD and needing speech and language therapy due to communication difficulties is quite common.



Attention deficit disorders and attention hyperactivity disorders deal with symptoms of inattentiveness, impulsivity, and hyperactivity, all of which often lead to issues associated with speech, language, hearing and listening, reading and writing, and language.

Both adults and children alike can suffer from attention disorders, with most cases being diagnosed in childhood and is found to significantly affect children's academic performance in school due to the inability to focus, concentrate, and remain organized. Adults who suffer attention disorder also have performance difficulties in their jobs, whether it's in keeping track of appointments and deadlines, having the ability to stay on topic and focused during meetings and presentations, or in motivation, self-esteem, and poor decision making.



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- metacognition – problems in finding a good approach to problem solving and the ability to consciously think through items put in front of them will cause individuals with ADD and ADHD confusion and a sense of feeling overwhelmed with the material lacking in sense.

42.1.2 Symptoms of communication disorders associated with attention deficits

- inattentiveness – children and adults alike who suffer from ADD and ADHD have difficulty following along in conversations and being able to internalize what is being said to them. This isn't a result of disinterest or not caring, as it is usually mistaken to be. Rather, it's a result of a physical and mental inability to focus. Speech and language therapists can help find shortcuts or techniques that make engaging in conversation and following along in order to engage at school, work, and social settings.
- impulsivity – sometimes individuals with ADD and ADHD will say whatever comes to mind, whether it's inappropriate or not. They will interrupt others often while they are speaking, and though it is not intentional, they cannot help themselves. Where people without attention disorders can discern the respectful and appropriate times to join in conversations, adults and children who have attention and communication disorders will often respond on impulse rather than thinking through what might be considered respectful versus disrespectful behaviors.
- lack of organization – when someone suffers an attention disorder, they often have difficulties keeping appointments, arriving places on time, and sustaining an organized environment. Oftentimes, this causes frustrations for caregivers and loved ones, but more so it causes an internal feeling of chaos for the individual. People with attention disorders usually feel out of control and like things are never in order. Speech and language therapists can help individuals with every day life skills like setting daily goals, keeping a calendar, or setting up a place in the home that helps them to get organized and stay focused from all the extra and unnecessary distractions around them.



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- lack of motivation – a lot of times people with attention disorders get used to not fully or properly carrying out their responsibilities, which leads to a lack of motivation to get things done, interact with others, and put themselves in situations that involves communication.
- low self-esteem – along with lack of motivation, people with ADD and ADHD will often find faults in themselves, resulting in poor self-esteem and self-image. Through working with a speech and language therapist, working on areas that focus on goal setting and on strengths can help individuals with seeing themselves in a more positive light.
- changes in voice quality – hoarseness of the throat and having trouble speaking at appropriate volumes can be the result of involuntary vocal tics like grunting, coughing, repeated throat clearing, and vocal cord abuse. Vocal cord abuse can be the result of excessive screaming or yelling during moments of hyperactivity or emotional outbursts.

42.2 Memory disorders



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Memory disorders come as a result of some kind of neurological damage to the centers of the brain that deal with recall, retention, and short and long-term storage. These disorders can be progressive as in acquired diseases associated with time, such as Alzheimer's, or memory disorders can be immediate upon significant damage to the head and brain from a bad car crash or head injury as the result of being subjected to severe abuse.

While there is no cure for most memory disorders, suffering individuals can receive treatment that helps them with daily living skills and compensation techniques that make up for many of their impairments. Seeking the help of speech and language therapists can greatly help these individuals with quality of life. Here are some of the common disorders associated with memory and communication that speech and language therapists treat.

- agnosia – a neurological disorder that affects either the parietal or occipital lobes of the brain, this disorder makes it difficult to recognize or identify certain objects, people, or sounds. Speech therapists work with patients with agnosia, particularly auditory agnosia, in ways that they can utilize resources of familiarity. For instance, an individual with agnosia might be asked, “what would you like for breakfast?” and they may question, “what is breakfast?” The word that was once familiar, “breakfast,” is now lost on them completely. Speech therapists can aid in coming up with coping mechanisms for daily living, such as written notes around the house or a journal that identifies key words and important activities related to the client's daily needs.
- dementia – when the brain becomes damaged over the course of time, it deteriorates and it becomes more difficult for individuals to retrieve information as easily as they did in their youthful or healthier years. Dementia, however, is not a “normal” symptom of old age like growing gray hairs or having slight slips in memory. Rather, dementia is a cognitive impairment that breaks down centers of the brain. Some symptoms of dementia are



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repetition in speech and actions, agitation and frustration, and paranoia, to name a few. These symptoms making caring for a person with dementia very difficult for loved ones, so as a speech therapist, one might offer services for coping with dementia and diseases associated with dementia for family and caretakers as well.

- Alzheimer's— a progressive, degenerative brain disease in which the cellular connections in the brain are lost. Alzheimer's is a form of dementia and is most commonly associated with the cognitive decline that happens in old age.
- traumatic brain injury – an outside force of an extreme nature causes damage through the skull and to the brain. The leading cause of brain injuries is at 28% due to a fall of some kind, followed by 20% due to traffic accidents. Being struck by an object and physical assaults also account for about 30% of trauma to the brain, where the remaining 22% of brain injuries are due to other transportation accidents or unknown reasons. Severe head injuries can cause potential long-term or short-term amnesia, an abnormal mental state affecting memory and the ability to learn. The memory centers of the brain along with the loss of speech, language, motor skills (including those of the oro-facial region) and comprehension skills can be greatly affected. Speech and language therapists work with brain trauma patients in alternative methods of communication to compensate for their loss of language, movement, or retrieval of words. In addition, memory issues such as recognition of familiar faces and names, places and time and place can be affected. Compensating for these gaps in memory and recognition, speech therapists can work with families and caretakers as well as clients in establishing day-to-day living plans that aid in comfort, alternative forms of communication, and quality of life.
- Huntington's Disease – a brain disorder that leads to uncontrollable movements, emotional instability, and the lacking of intellectual abilities. Tics and twitches are early signs of Huntington's Disease, whereas slurred and slowed speech and communication difficulties progressively get worse over time.
- Parkinson's Disease – a neurodegenerative disease that affects how brain cells normally produce the chemical dopamine, which carries signals between nerves within the brain. Muscular and motor issues as well as impaired balance, stiffness, and tremors are some common characteristics associated with Parkinson's. Cognitive abilities such as memory, fluency, attention, and executive functioning can become impaired over time. This includes abilities in speech, where the facial muscles are often affected and speech becomes slow and slurred, with stuttering patterns often making it difficult to understand the individual.



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42.3 Cognitive disorders

Trauma to the head and brain can result in significant damages and communication disorders of multi-varieties. In a previous module we explored the various lobes of the brain; here, we discuss the effects of damage to these various lobes.

42.3.1 Locations of brain injuries

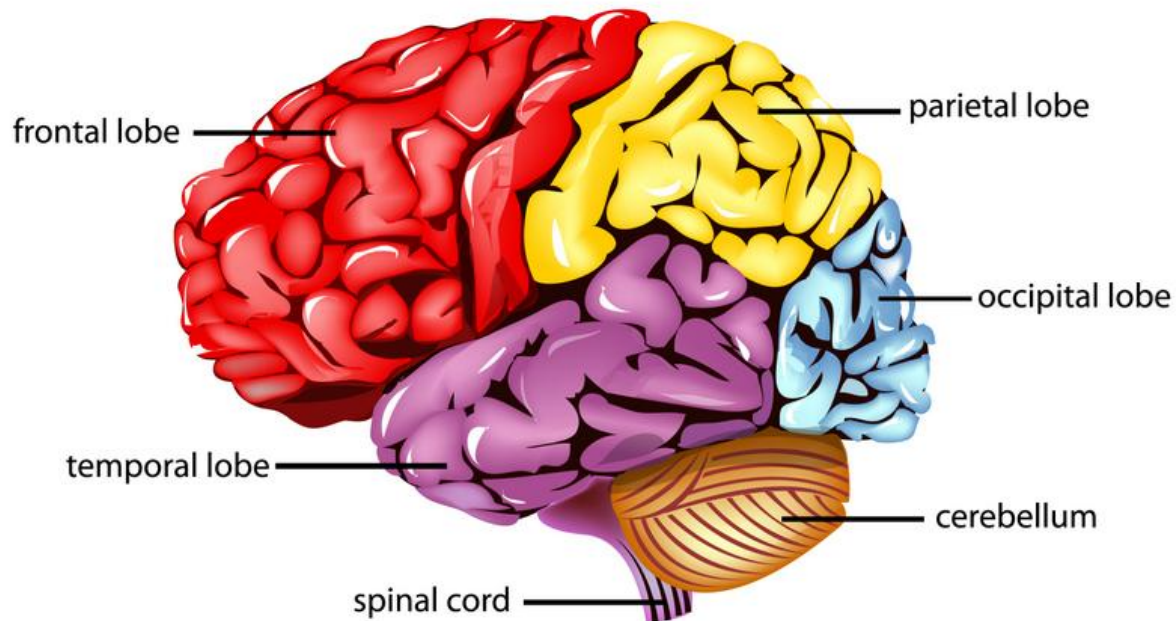
- frontal lobe – the frontal cortex of the brain houses the functioning of problem solving and judgment. When there has been some kind of defect to this area of the brain, not only does it make processing and decision making difficult, it affects one’s overall behavior and emotional state, often leading to poor decision making, depression, anxiety, impulsiveness, emotional outbursts, aggression, personality or mood changes, and inappropriate behaviors. In addition, the frontal lobe affected by disease or disorder will often affect expressive speech, or the ability to communicate properly. Also important are the higher level executive functions that come along with planning, time management, and attention.



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Parts of the Human Brain



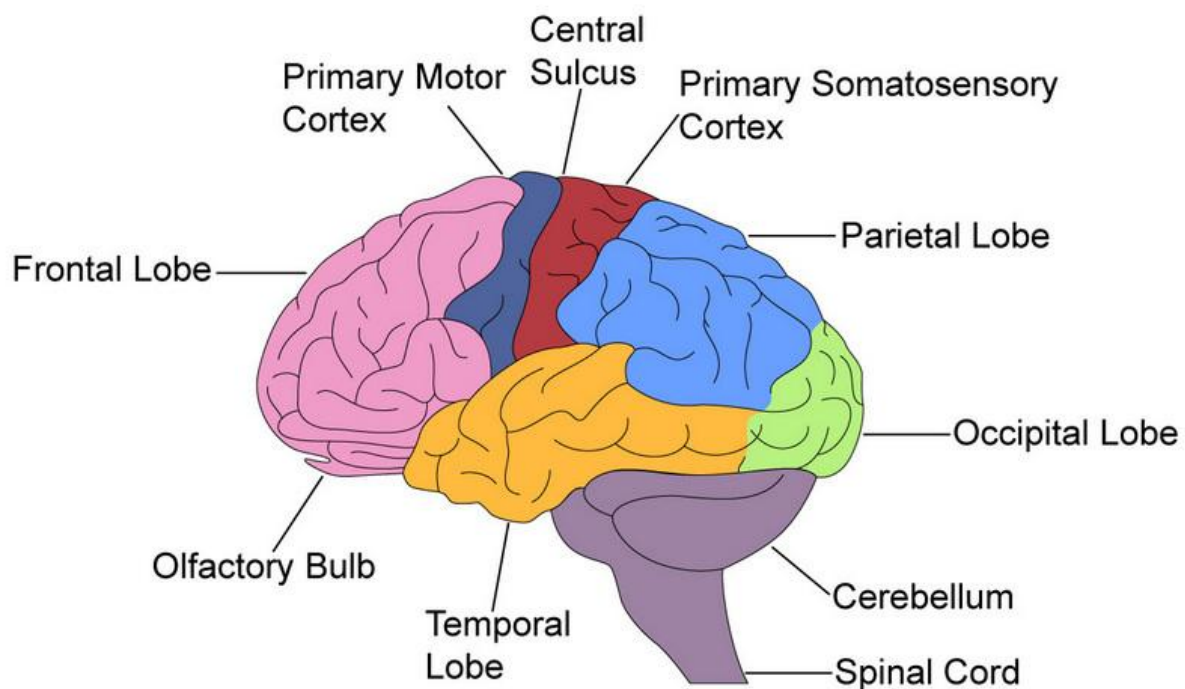
- parietal lobe – visual and spatial perceptions are affected, often making it difficult for individuals with damage to this area of the brain to easily get around without assistance. In addition, distortion in perception of size, shape, and color can cause confusion and frustration. Brain damage or disease attacking the parietal lobe will cause significant lifestyle difficulties associated with getting from place to place and all forms of transportation and orientation. Furthermore, reading abilities stem from the parietal lobe, so speech and language therapists will work on daily life functioning, image and picture recognition activities, and offer technological resources for reading assistance.
- occipital lobe – dealing with visual forms of communication, damage to the occipital lobe, resulting in visual agnosia. As defined above, agnosia affects the memory and retrieval of information. Colors, visuals, and images are unrecognizable and foreign, items and objects as well as words on a page might be both unrecognizable or appear to move, resulting in dizziness. Lesions in the parietal-occipital region of the brain can cause word blindness and writing impairments like alexia (a reading disorder) and agraphia (a writing disorder).
- temporal lobe – in the previous section on memory and recall, the temporal lobe would be heavily affected as this is the center of the brain that deals with memory functioning. In addition,



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receptive language centers for the brain are housed here, making thinking, communication, and expression difficult. Seizures and epilepsy are related to problems of the temporal lobe. Speech and language therapy will help individuals to strengthen and utilize the cognitive skills that still remain, while finding coping and alternative mechanisms to make up for the damages to the affected region.



42.3.2 Common forms of brain injuries



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Some common forms of brain injuries that may result in the services of clinicians in the speech and language therapy profession are:

- aneurysm – the budging of an artery in the brain that can lead to stroke, brain damage, and death.
- anoxic brain injury – inadequate oxygen levels are carried to the brain.
- closed brain injury – when there is a blow to the head, like in the case of traumatic brain injuries.
- concussion – an impact to the head that can be very mild, providing short-term effects or very severe, resulting in unconsciousness and potential long-term brain damage.
- brain contusions – blood vessels leaking, causing bruising to the brain tissue.
- hematoma – an injury to the head where the fluid surrounding and protecting the brain doesn't actually retain the force, resulting in severe damage.



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42.4 Swallowing Disorders

Swallowing disorders, or dysphagia, are any issues that an individual has in the process of swallowing, regardless of what phase it occurs in. Since we have not discussed swallowing very much in this module up until this point, let's take a look at the different stages of swallowing first.

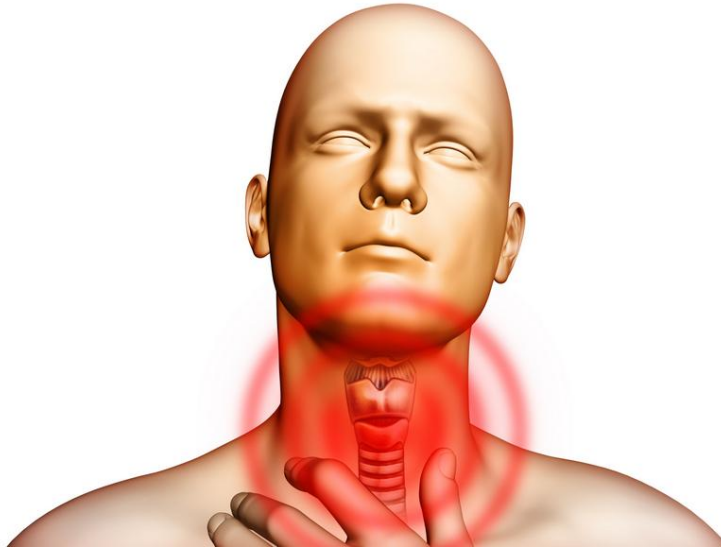
42.4.1 Understanding the stages of swallowing

Like many other functions that our body operates, swallowing seems like a simple, quick, one-step process. It is, however, a process that involves a number of steps and muscles. With any of the complicated processes our body goes through to complete everyday task, one small obstacle can cause a lot of problems. To truly understand how swallowing disorders can affect our lives, we need to first have a better understanding of the process of swallowing, which goes through three stages:

- the oral phase: This is everything in the swallowing process that occurs in the mouth. This phase of the process includes processing the food to make it manageable to swallow, and pushing it towards the back of the throat. Some problems in this phase are not necessarily attributed to swallowing disorders (problems with the teeth, for example), even though this is an important part of the swallowing process.
- the pharyngeal phase: Once the food has been broken down and pushed to the back of the throat in the oral phase, the reflexes that most people attribute to the swallowing process occur in the pharyngeal phase. Once again, this seemingly simple reflex is actually quite complicated, as it involves squeezing the food so that it slides down the throat, blocking the airway so that no food or liquid goes into the airway, and making sure everything moves smoothly to prevent choking. Even if you do not have a swallowing disorder, you may have felt the effect that one can have. Whenever it feels like something has “gone down the wrong pipe,” it is because the swallowing reflex did not close the airway off as quickly as it could have.



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- the esophageal phase: The food has been broken down and processed, and has been pushed safely into the correct tube in the throat, and now the esophagus takes over. The esophagus ensures that the food moves smoothly and safely from the throat to the stomach, by continuing to constrict it and push it through the throat. Once the food or liquid reaches the stomach, the swallowing process is over.

42.4.2 Types of swallowing disorders

Now that you have a stronger understanding of the swallowing process, we can discuss the types of dysphagia that you will see as a speech language therapist. There are many types of problems that can cause people difficulty when they are swallowing, some of which are not really considered “swallowing disorders” (like heartburn and acid reflux). Let us focus, then, on the disorders that can truly cause a person to have trouble swallowing.

- Epiglottitis: This could be a life-threatening issue, so if you believe that a patient is suffering from epiglottitis, then you need to act immediately. Epiglottitis is characterized by a swelling of the epiglottis, or the base of the tongue. This swelling can cause a blockage that prevents air from properly flowing into your lungs, which could cause a victim to suffocate. This is not very common, but it is definitely something that you need to be aware of in case one of your patients is unlucky enough to suffer from it.
- Goiter: A goiter is actually a symptom or the effect of a different problem, but it is a clear signal that something is wrong. A goiter appears when a person’s thyroid increases in size. This can be caused by:
 - Thyroid cancer: Thyroid cancer is a very common type of endocrine cancer, and is usually accompanied by a lump in the throat, a cough, hoarseness, pain in the throat and neck, difficulty swallowing, swollen lymph nodes in the neck.

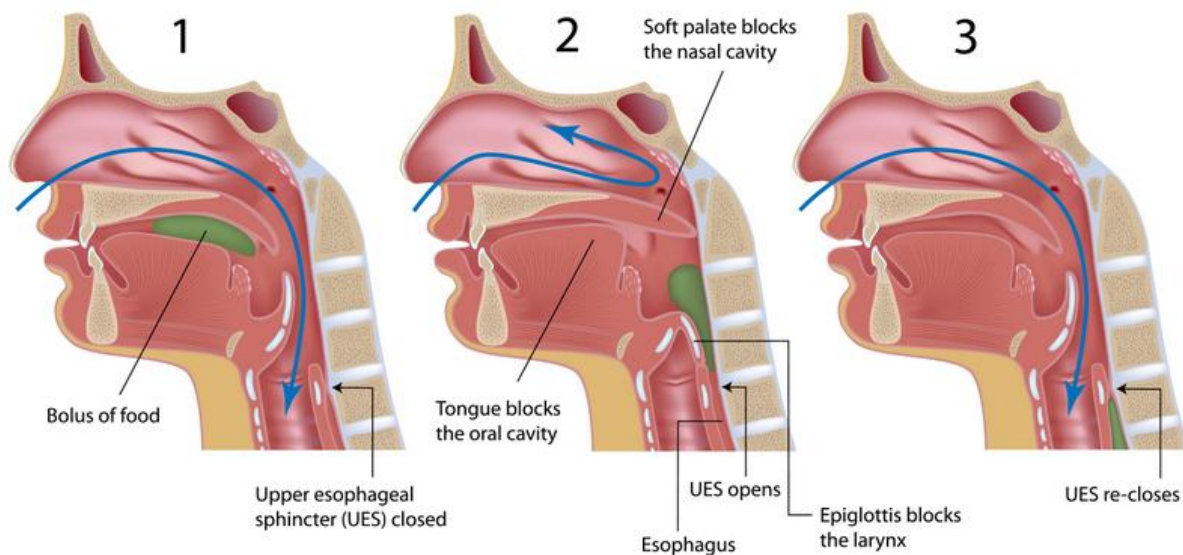


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- Graves' disease: Graves' disease is a disorder that affects the autoimmune system, which causes the overproduction of thyroid hormones in the body.
- Hyperthyroidism: Hyperthyroidism is another condition in which the body produces too many thyroid hormones.
- Hypothyroidism: Hypothyroidism is a condition in which the body does not produce enough thyroid hormones.

Swallowing

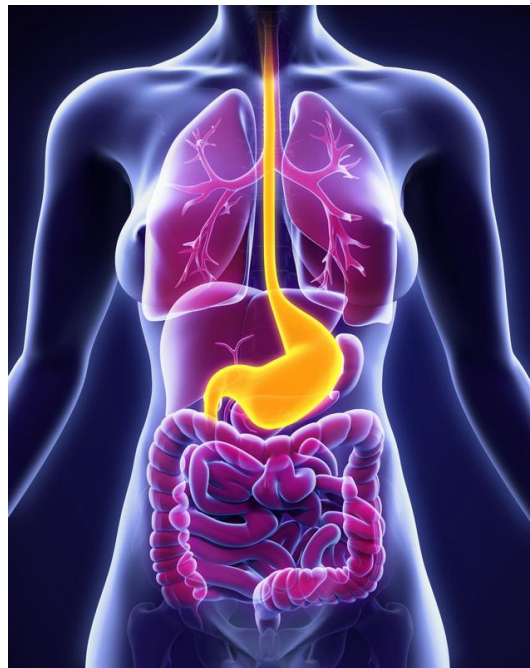
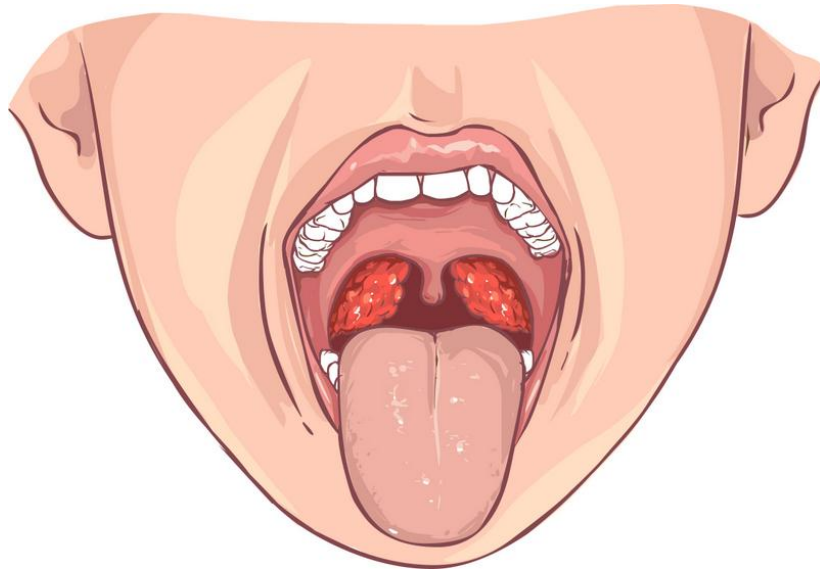


- Esophagitis: Esophagitis is a term used to describe any inflammation you might find in a patient's esophagus. This can be caused by a lot of different problems, but usually occurs when too much stomach acid is making contact with the esophagus. This can cause your patient to have irritation, trouble swallowing, a sore throat, and/or heartburn.
- Esophageal cancer: Esophageal cancer occurs when a malignant tumor forms in a patient's esophagus, and can appear anywhere along the esophagus. Esophageal cancer will manifest itself in one of two forms:
 - Squamous cell carcinoma: The cancerous tumor forms in the thin cells that lay flat against the esophagus, usually on the middle or the top of the esophagus (closer to the mouth).



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- Adenocarcinoma: The cancerous tumor forms in glandular cells of the esophagus that are responsible for the production of mucus and other fluids.



- Stomach cancer: Also known as gastric adenocarcinoma, stomach cancer occurs when cancerous cells or tumors develop in the stomach lining itself. Stomach cancer is pretty difficult to diagnose early on, but you should suspect it if your patient is complaining of



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the following symptoms: nausea/vomiting, frequent heartburn, loss of appetite (sometimes accompanied by sudden weight loss), constant bloating, early satiety (feeling full after eating only a small amount), bloody stools, jaundice (a yellowish discoloration in the eyes and skin), excessive fatigue, stomach pain (which may be worse after meals).

- Herpes esophagitis: Herpes esophagitis occurs when herpes in the esophagus causes inflammation and irritation to the inside of your patient's throat. Beyond being very uncomfortable, this condition can increase a patient's risk for other disease that could cause much worse than discomfort.
- Herpes stomatitis: This is also known as oral herpes, which is a condition that affects your patient's mouth, and could have a hindrance on his or her ability to process and swallow food. Like most forms of herpes, it is contagious and therefore requires special care.
- Thyroid nodule: A thyroid nodule is a lump in the patient's thyroid gland that could be solid or contain fluid. These nodules are fairly common and rarely cause anything more than a little discomfort.
- Infectious mononucleosis: Infectious mononucleosis is also called mono, which is known colloquially as the kissing disease because it is often spread through saliva. While mono affects many different parts of a patient's body, it is relevant as a swallowing disorder because it can cause the patient to have a sore throat or swollen glands in the throat and neck.

[EXAM LINK](#)