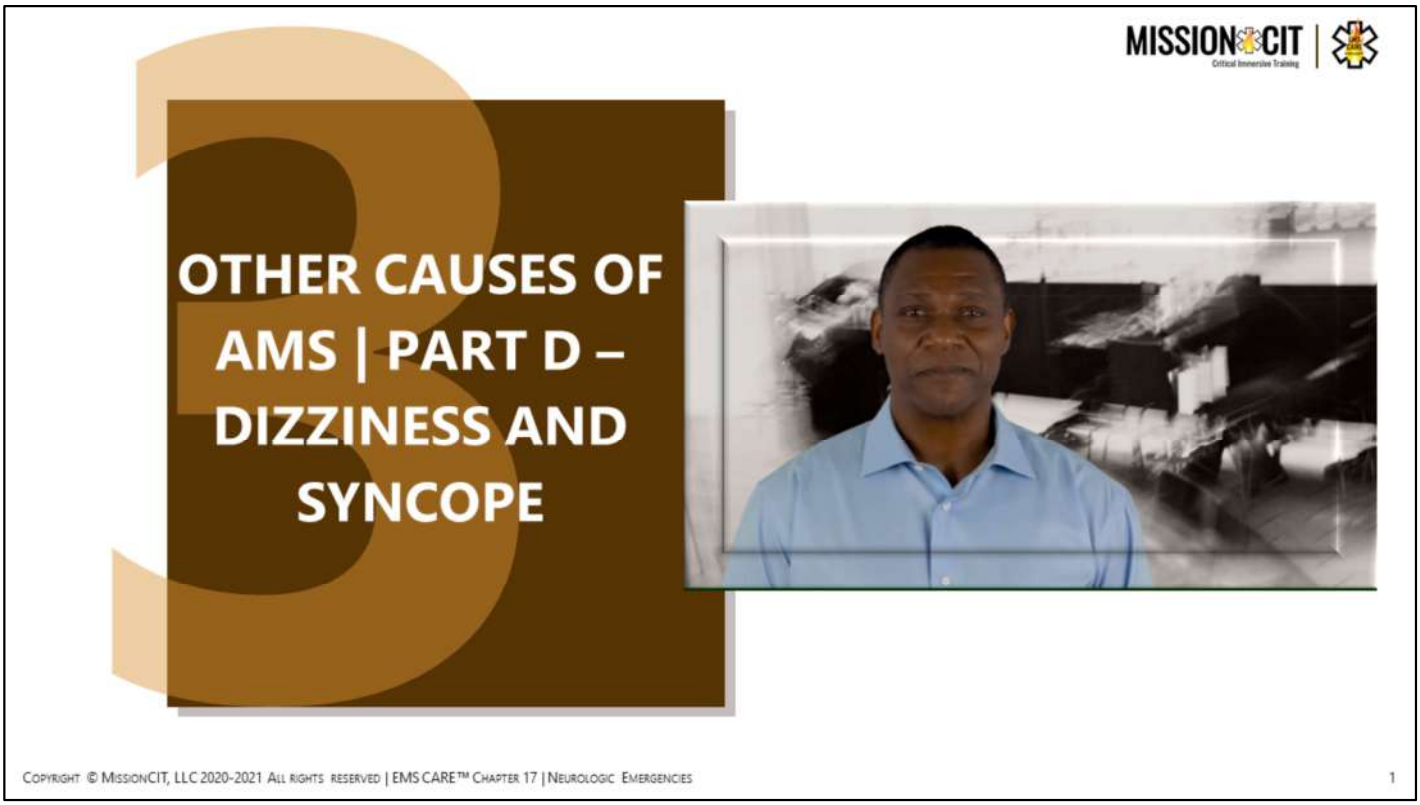
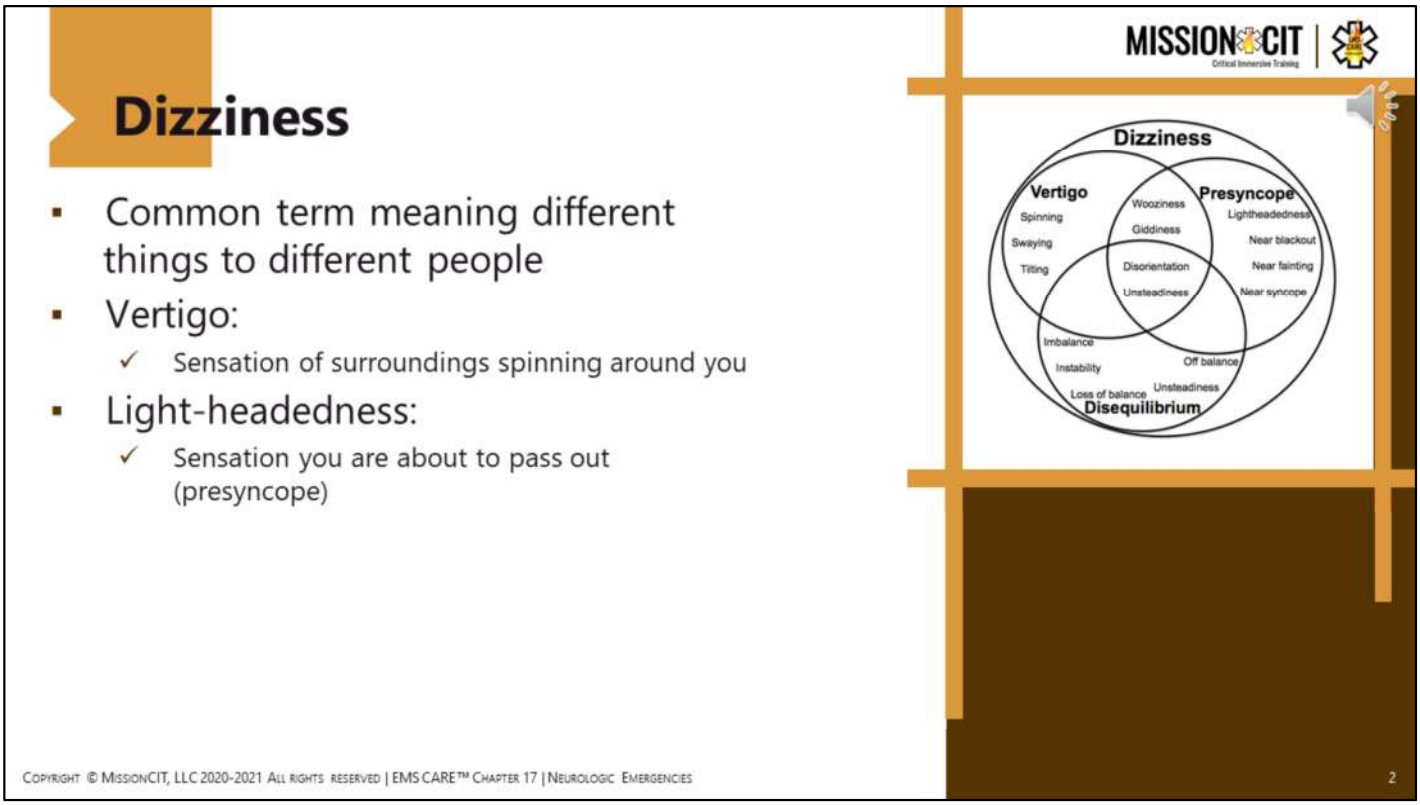


I hope you found the video on TIA's worthwhile. We are now going to discuss Dizziness and Syncope.

We will begin by discussing the conditions, symptoms and causes, and then discuss the patient assessment process. Ultimately, finishing up with Patient care.

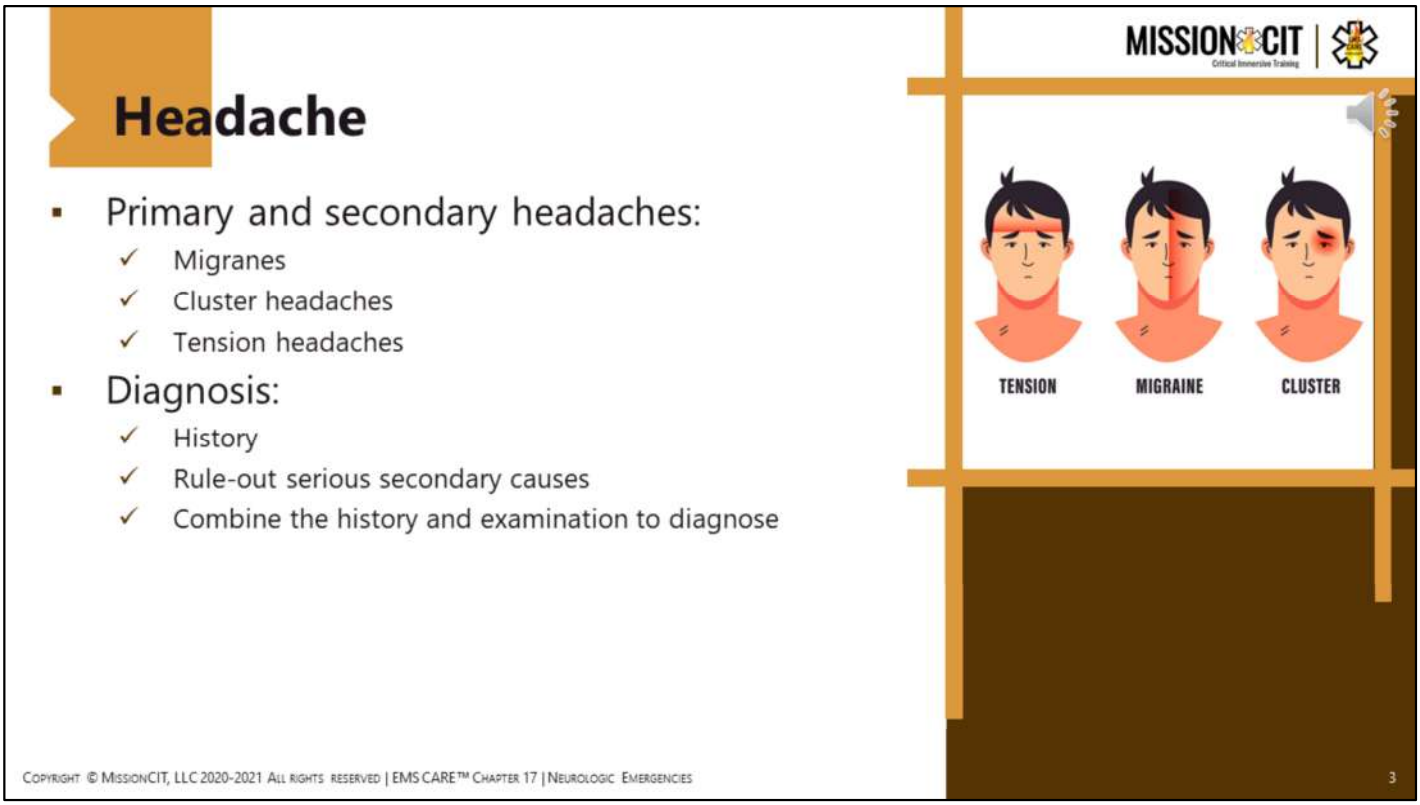
Take note that Syncope is a common condition. According to the Cleveland Clinic, it affects 3% of men and 3.5% of women at some point in life. Syncope is more common as you get older, and affects up to 6% of people over age 75. The condition can occur at any age, and happens in people with, and without other medical problems.



Dizziness is a term used to describe a range of sensations, such as feeling faint, woozy, weak or unsteady. Dizziness that creates the false sense that you or your surroundings are spinning or moving, is called vertigo.

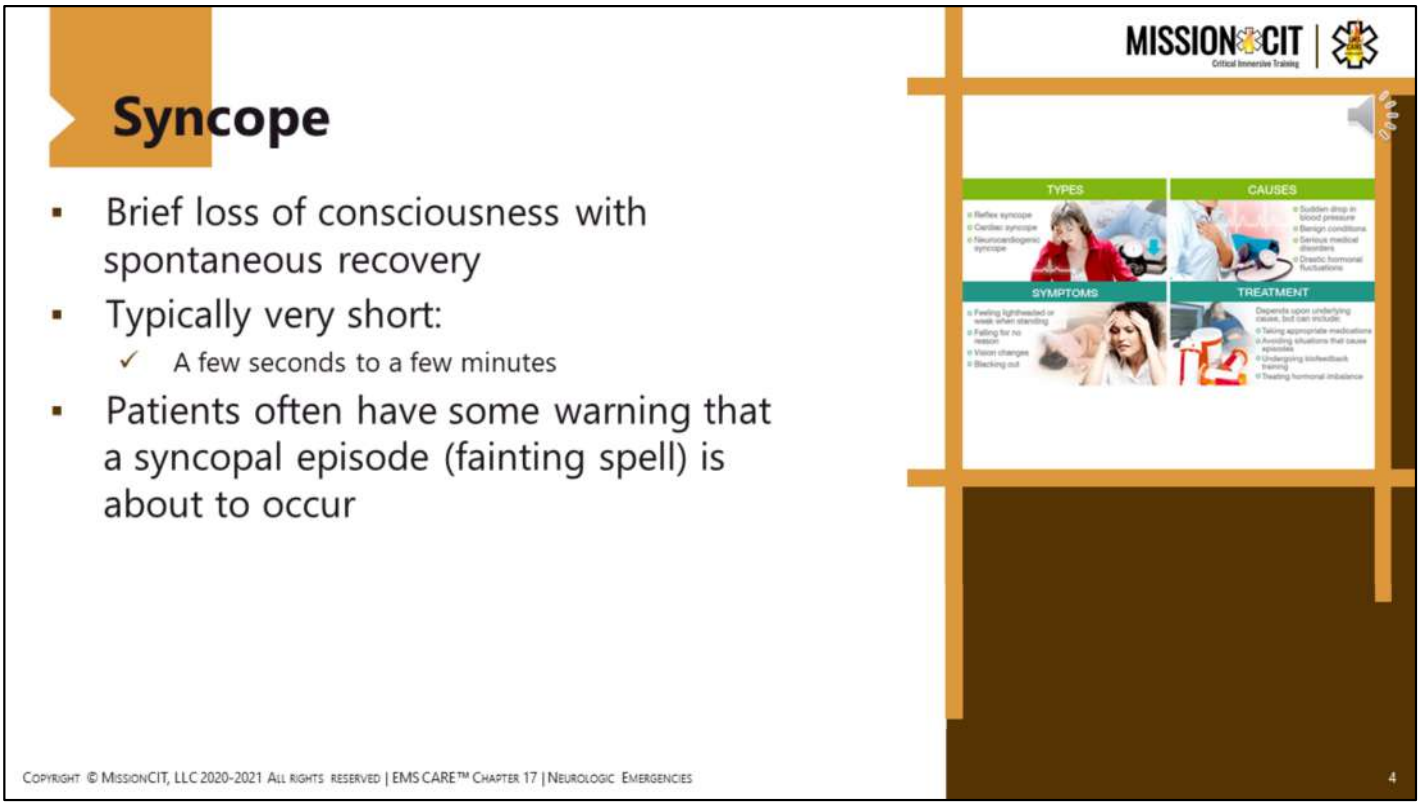
When you're dizzy, you may feel lightheaded, woozy, or disoriented. If you feel like you or the room is spinning, you have vertigo. These feelings may make you lose your balance.

And Light-headedness is a Sensation when you feel you are about to pass out, sometimes called pre-syncope.



Headaches are one of the most common neurological disorders — and there are a variety of different kinds of headaches, such as migraines, cluster headaches, and tension headaches. They fall into two main categories: primary and secondary headaches. Headache pain results from signals interacting among the brain, blood vessels and surrounding nerves. Headache symptoms vary, depending on the type of headache. A headache that is associated with dizziness requires immediate medical care.

- History is the first step when diagnosing headache
- Rule-out serious secondary causes for a headache
- Combine the history and examination to diagnose headache



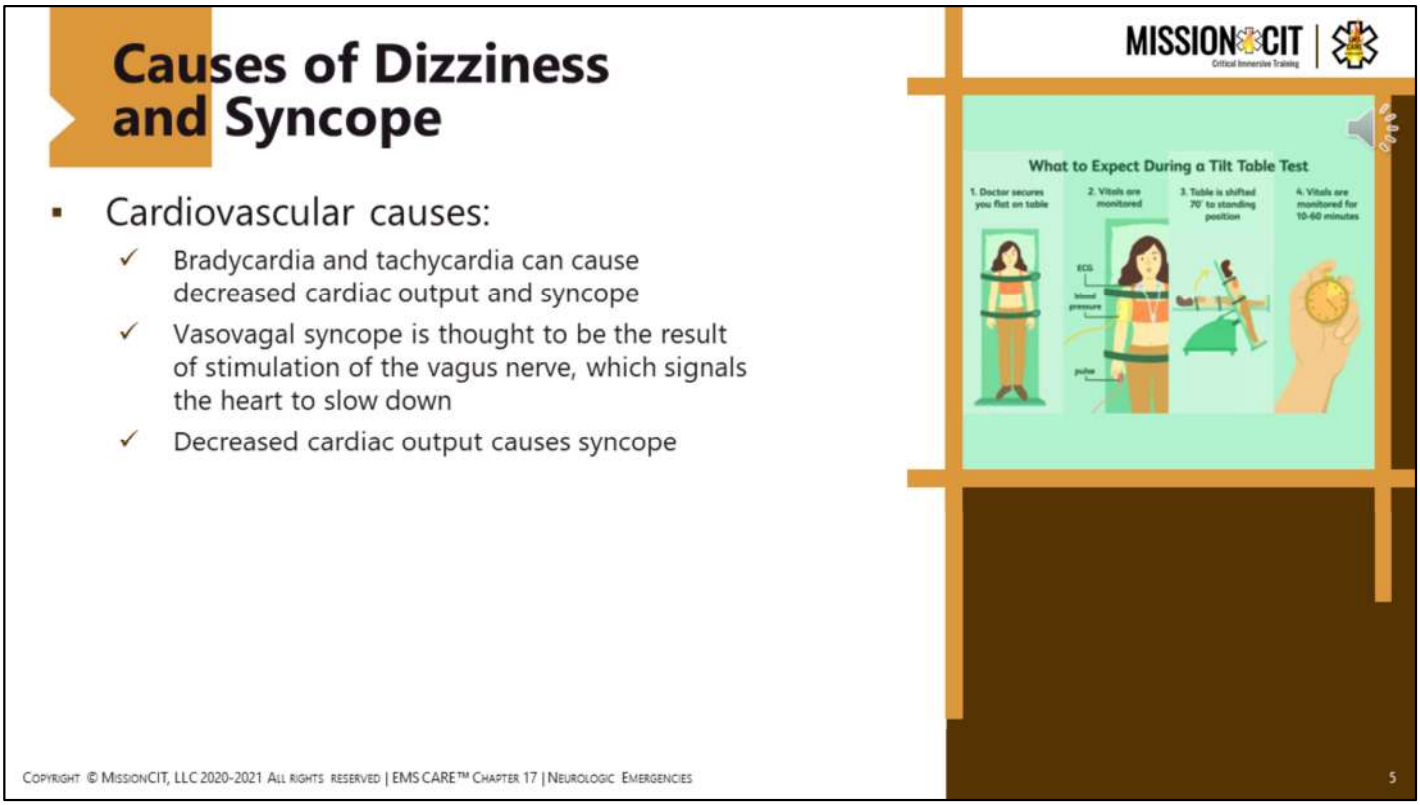
Syncope is the medical term for fainting or passing out. It is caused by a temporary drop in the amount of blood that flows to the brain.

Syncope can happen if you have a sudden drop in blood pressure, a drop in heart rate, or changes in the amount of blood in areas of your body. If you pass out, you will likely become conscious and alert right away, but you may be feeling confused for a bit.

Syncope symptoms include:

- A Brief loss of consciousness with spontaneous recovery,
- Episodes are Typically very short; A few seconds to a few minutes, and
- Patients often have some warning that a syncope episode or fainting spell is about to occur.

When discussing Syncope, it's important to understand the Autonomic Nervous System (ANS). The ANS automatically controls many functions of the body, such as breathing, blood pressure, heart rate, and bladder control. Most times, these things happen without us noticing.



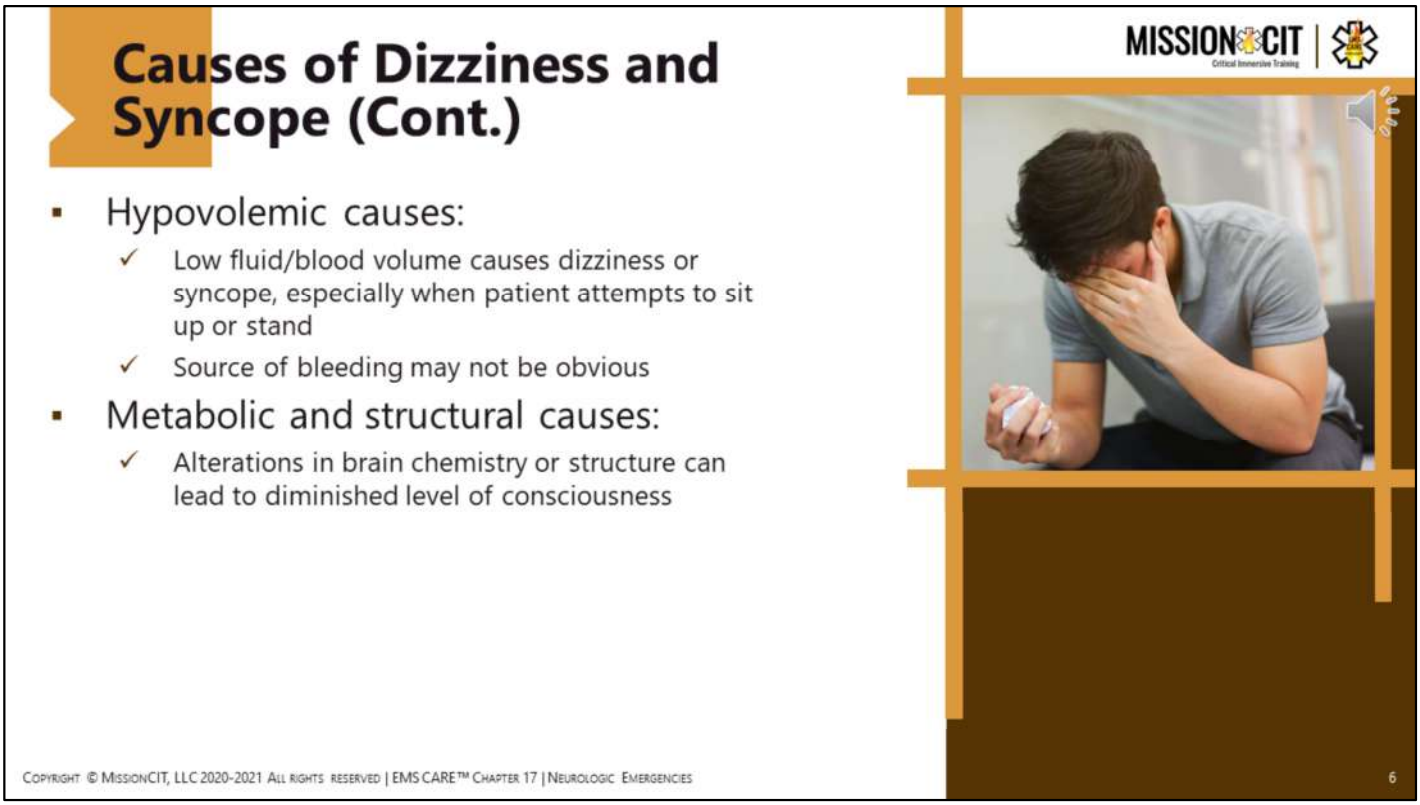
Cardiovascular causes of Syncope include:

- Bradycardia and tachycardia can cause decreased cardiac output and syncope.
- Vasovagal syncope is thought to be the result of stimulation of the vagus nerve, which signals the heart to slow down.
- Also, Decreased cardiac output may cause syncope.

The image on the slide shows a Tilt table used by clinicians, to perform a test that can show abnormal cardiovascular reflexes that can cause syncope.

Other types of syncope you may encounter include:

- Neurologic syncope is caused by a neurological condition such as seizure, stroke, or transient ischemic attack.
- Situational syncope happens only during certain situations that effect the nervous system, such as Dehydration, Intense emotional stress, Anxiety, Fear, Pain, Hunger. Use of alcohol or drugs, Hyperventilation, Coughing forcefully, or Urinating.

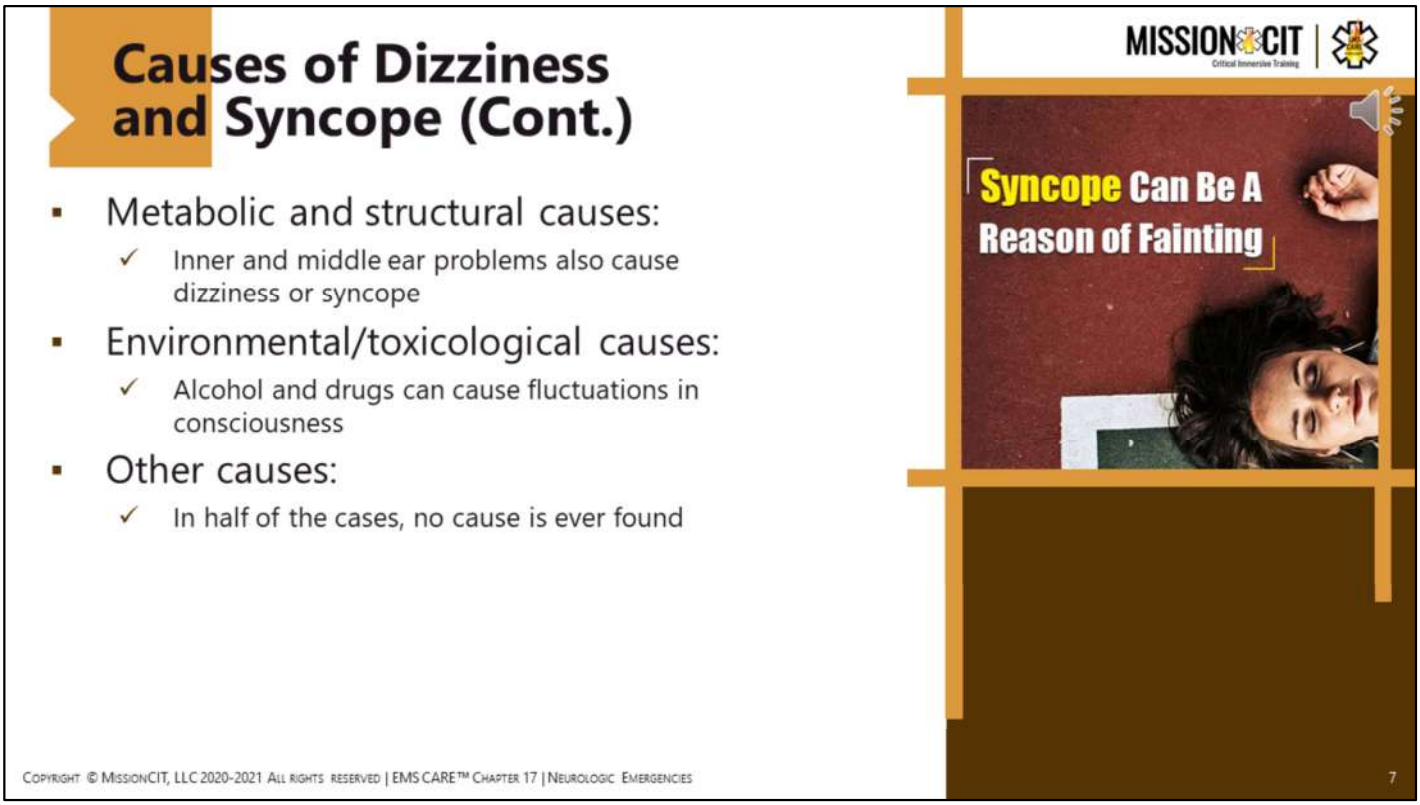


Syncope can be caused by many things. Many patients have a medical condition they may or may not know about, which affects the nervous system or heart.

Some Additional causes of Dizziness and Syncope include:

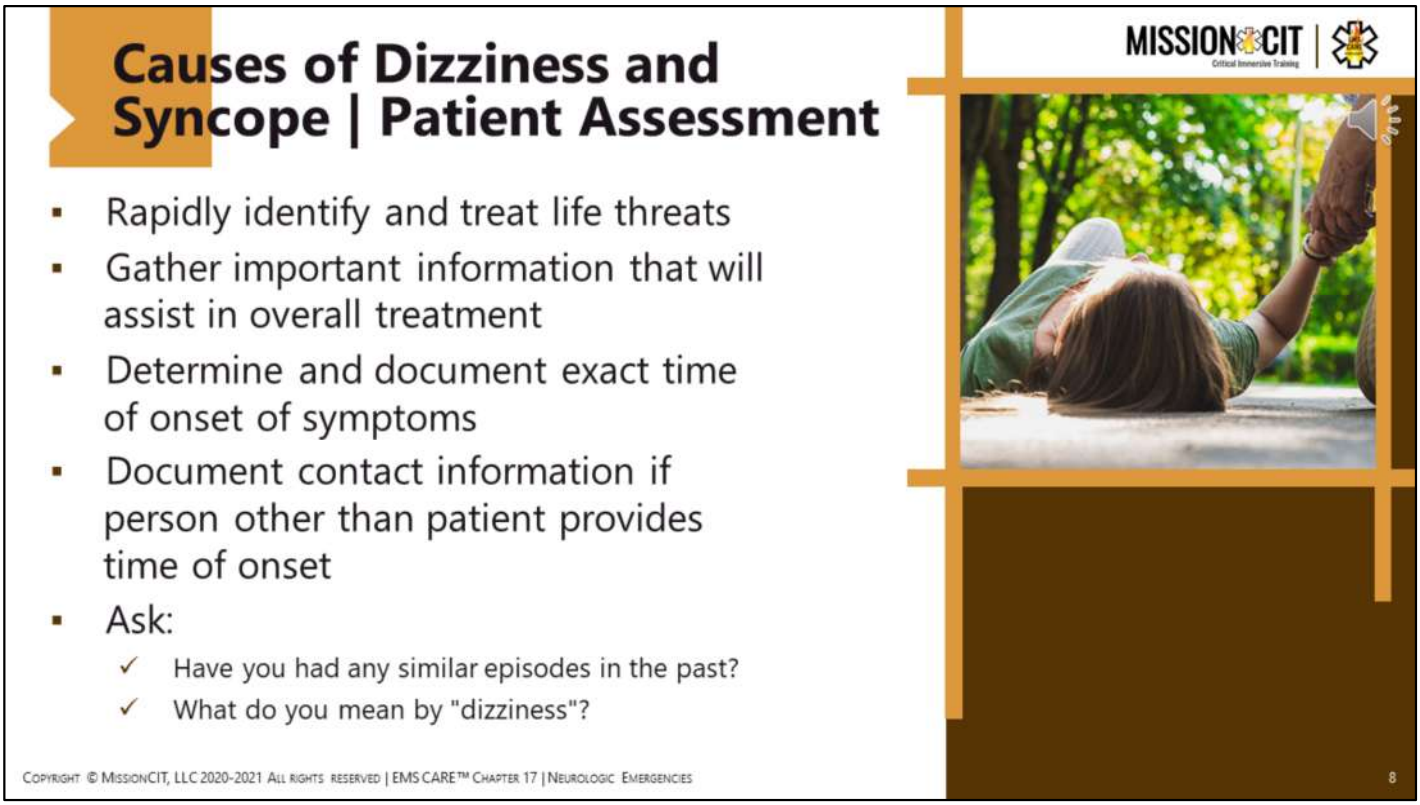
Hypovolemic causes: Low blood volume causing dizziness or syncope, especially when the patient attempts to sit up or stand; or a source of bleeding that may not be obvious.

Metabolic and structural causes include Alterations in brain chemistry, or structure that can lead to a diminished level of consciousness.



And some more additional causes of Dizziness and Syncope may include:

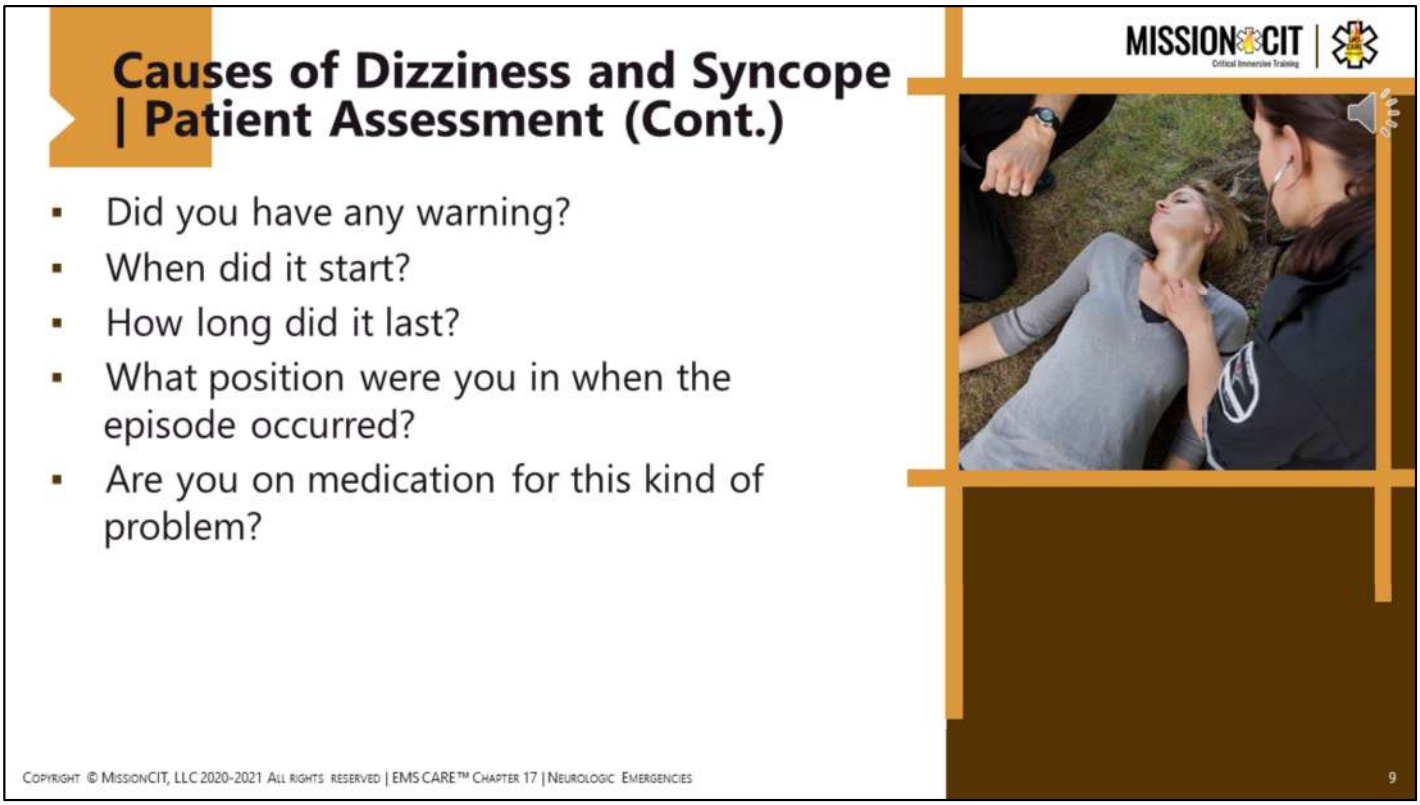
- Metabolic and structural causes such as inner and middle ear problems.
- Environmental or toxicological causes including alcohol and drugs can cause fluctuations in consciousness.
- And, in half of the cases, no cause is ever found.



So now, as we begin the secondary assessment associated with Dizziness and Syncope, remember to perform your standard primary assessment first, to rapidly identify and treat life threats.

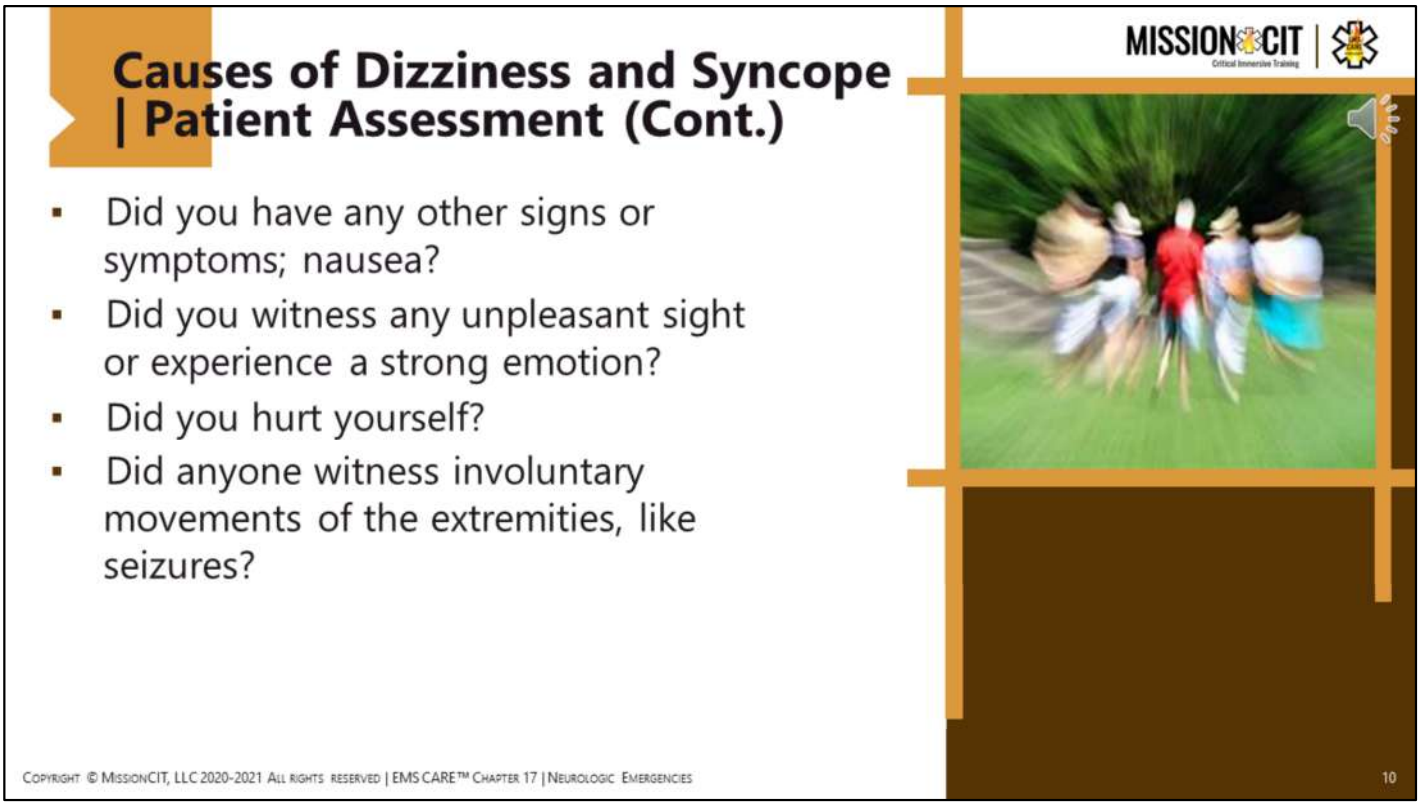
The secondary assessment should include:

- Gather important information that will assist in overall treatment.
- Determine and document the exact time of onset of symptoms.
- Document contact information if a person other than the patient provides the time of onset.
- Ask: Have you had any similar episodes in the past? And What do you mean by "dizziness"?



Continuing the secondary assessment associated with Dizziness and Syncope, additional questions may include:

- Did you have any warning?
- When did it start?
- How long did it last?
- What position were you in when the episode occurred, and
- Are you on medication for this kind of problem?



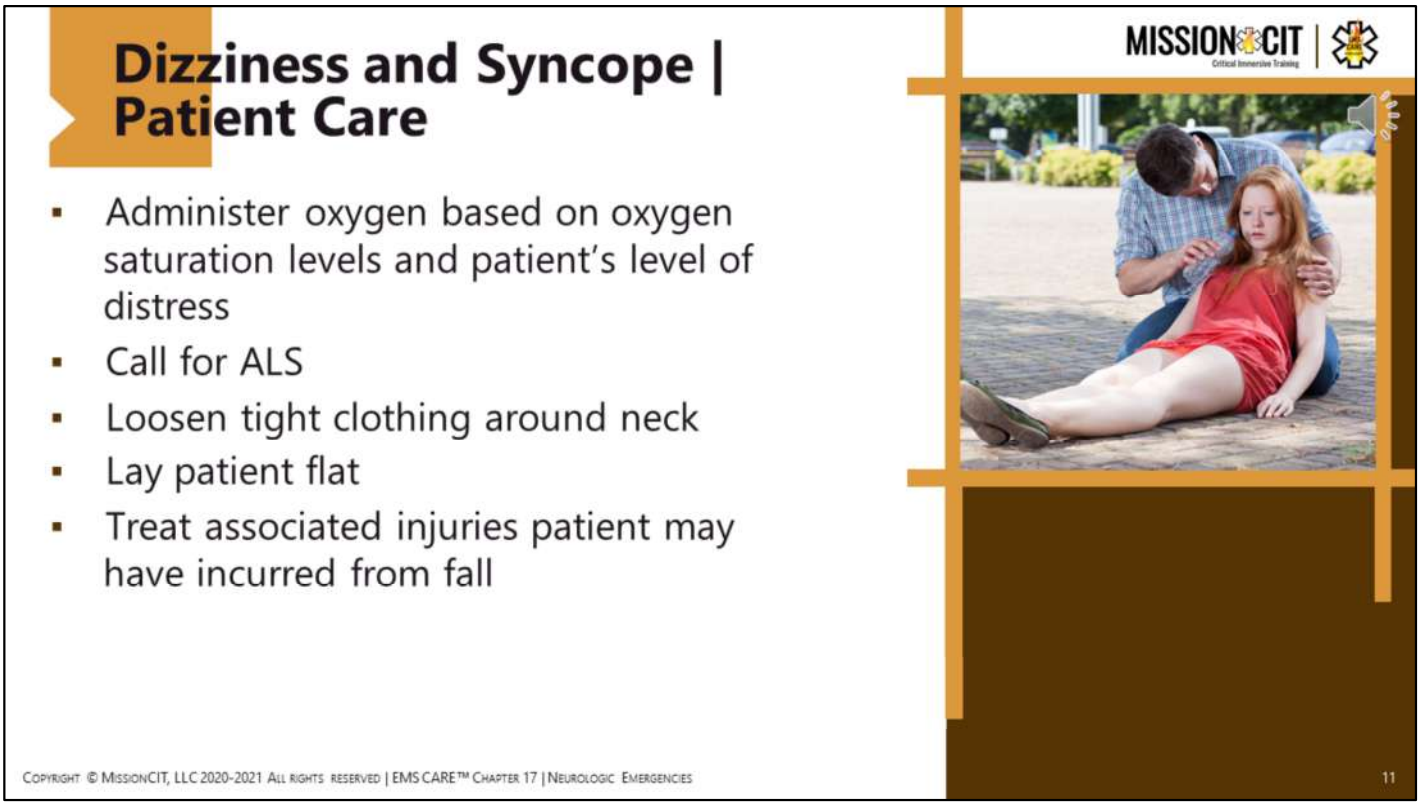
Continuing the secondary assessment associated with Dizziness and Syncope, additional questions may include:

- Did you have any other signs or symptoms; or did you experience nausea?
- Did you witness any unpleasant sight or experience a strong emotion?
- Did you hurt yourself, and
- Did anyone witness involuntary movements of the extremities, like seizures?

As we finish up the patient assessment questions for Syncope and Dizziness, understand that the underlying causes may be difficult to diagnose.

There is a battery of 9 initial tests a syncope patient may endure, before the doctor can pinpoint why the patient fainted. And if those do not uncover the root cause, other tests may be administered.

So, this is one of those areas where making sure the patient is safe with no life-threatening conditions, maybe the best that we can do.



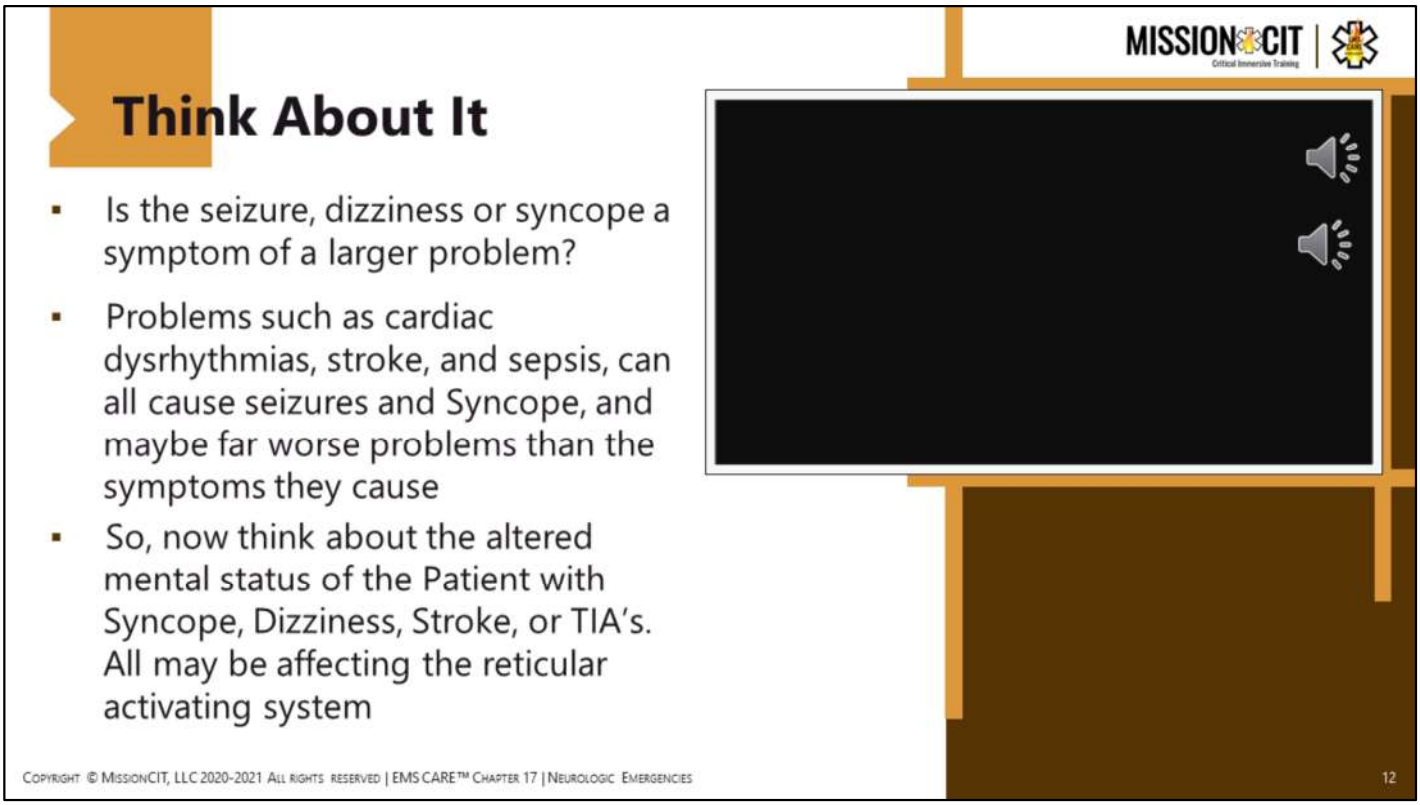
So, care for the Dizziness and Syncope patient may include:

- With a patent airway, administer oxygen based on the patient's oxygen saturation levels, and level of distress.
- Loosen any tight-fitting clothing around the neck.
- Lay the patient flat.
- Treat associated injuries the patient may have incurred from a fall.
- Call for ALS as warranted per local protocol.

Once diagnosed by a medical practitioner, treatment of Syncope may include:

- Taking medications, or making changes to medications already being taken.
- Wearing support garments or compression stockings to improve blood circulation.
- Making changes to diet.
- Being extra cautious when standing up.
- Elevating the head of the bed while sleeping.
- Avoiding or changing the situations or "triggers" that cause a syncope episode.

- Biofeedback training to control a fast heartbeat.
- Treatment for structural heart disease.
- Implanting a pacemaker, or
- An implantable cardiac defibrillator.



Is the seizure, dizziness or syncope a symptom of a larger problem?

You have ten seconds to think.

Often seizures and syncope point to a larger problem. Although they may be the patient's chief complaint, always look for a larger problem that may be causing these issues. Problems such as cardiac dysrhythmias, stroke, and sepsis, can all cause seizures and Syncope, and may be far worse problems than the symptoms they cause.

So, now think about the altered mental status of the Patient with Syncope, Dizziness, Stroke, or T I A's. All maybe affecting the reticular activating system. How do you differentiate and assess? How do you know how to manage your secondary assessment, to best identify the actual condition, administer treatment, and get backup, or advanced life support, if warranted?

That's it for this section on Dizziness and Syncope. Coming up next, Missah will review this entire topic on Neurologic Emergencies with you.

Thanks for listening and good studying.