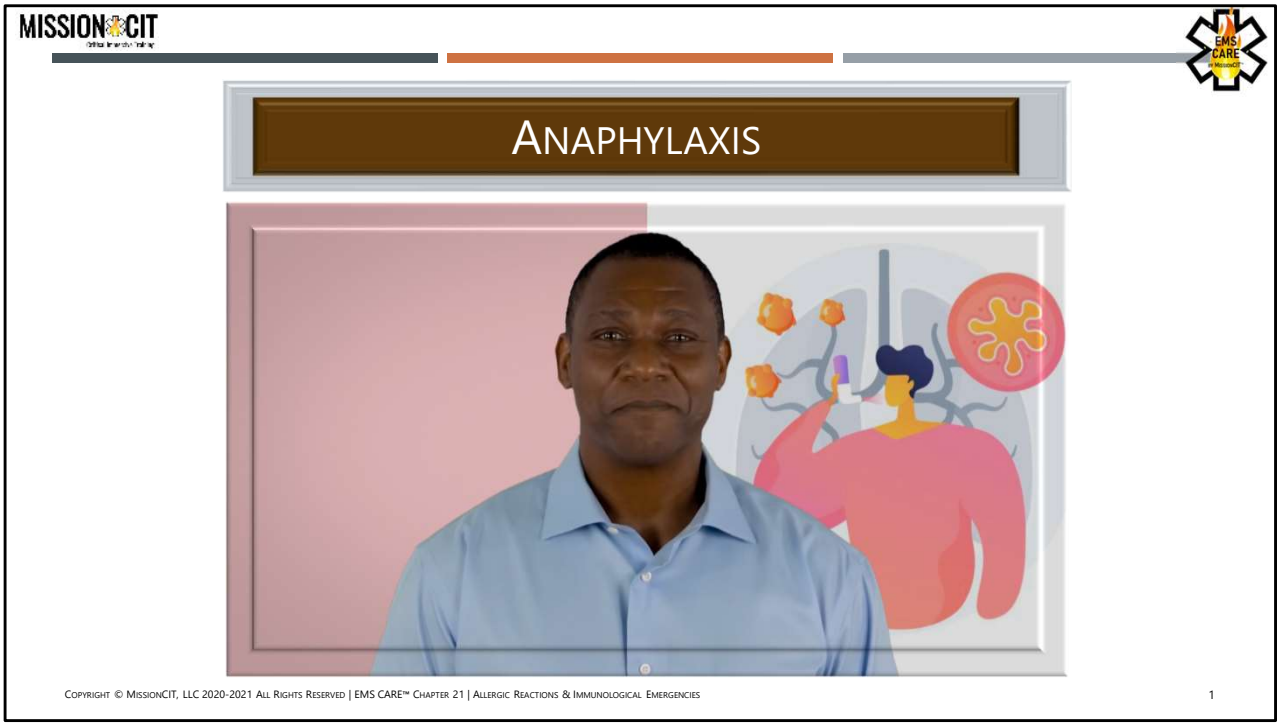


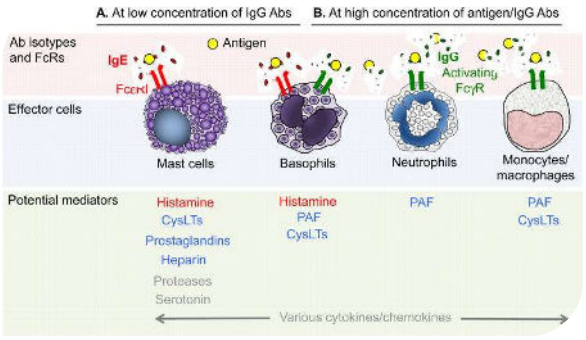
Thank you Missah!

Welcome to this lesson on Anaphylaxis, where we talk about this condition's pathophysiology, possible symptoms, and the appropriate care in a prehospital setting.

Good studying.

Pathophysiology of Anaphylaxis

- Fatal multi-organ response
- Releases chemical mediators
- Antigens contain high doses of these chemical mediators
- Body goes into a state of shock due to this sudden reaction
- Leads to severe symptoms



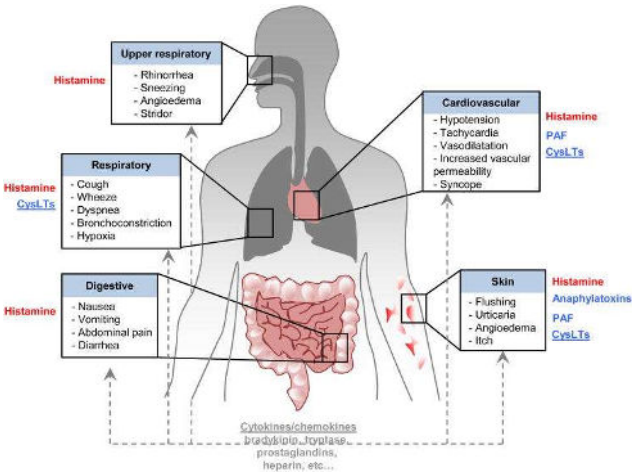
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Anaphylaxis is a potentially fatal multi-organ response by the body's immune system. The reaction for perceived harm from a foreign substance includes releasing chemical mediators from mast cells and basophils. The antigens contain high doses of these chemical mediators, and these are believed to cause Anaphylaxis.

When a flood of these antibodies is released, the body can go into a state of shock, making this condition so dangerous.

Symptoms of Anaphylaxis

- Flushed or pale skin
- Low blood pressure
- Constriction of airways
- Swollen tongue or throat
- Wheezing and trouble breathing
- Weak and rapid pulse
- Dizziness and fainting
- Nausea, vomiting, and diarrhea



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Since Anaphylaxis is a severe reaction to a substance, it can happen within seconds or minutes of exposure. In some people, the response can be delayed as well, but the symptoms are life-threatening.

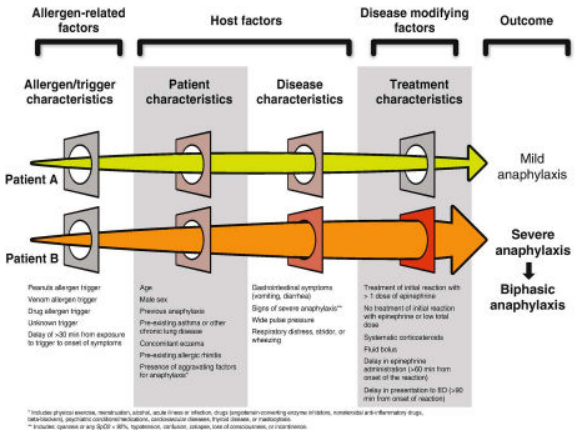
So, what should you look for?

- A flushed or pale skin
- Low blood pressure
- Constriction of airways
- Swollen tongue or throat
- Wheezing and trouble breathing, including shortness of breath

- Weak and rapid pulse
- Dizziness and fainting, and
- Nausea, vomiting, and intense diarrhea

Respiratory Distress

- Respiratory distress is a common symptom of anaphylactic shock
- Monophasic
- Protracted reaction
- Biphasic

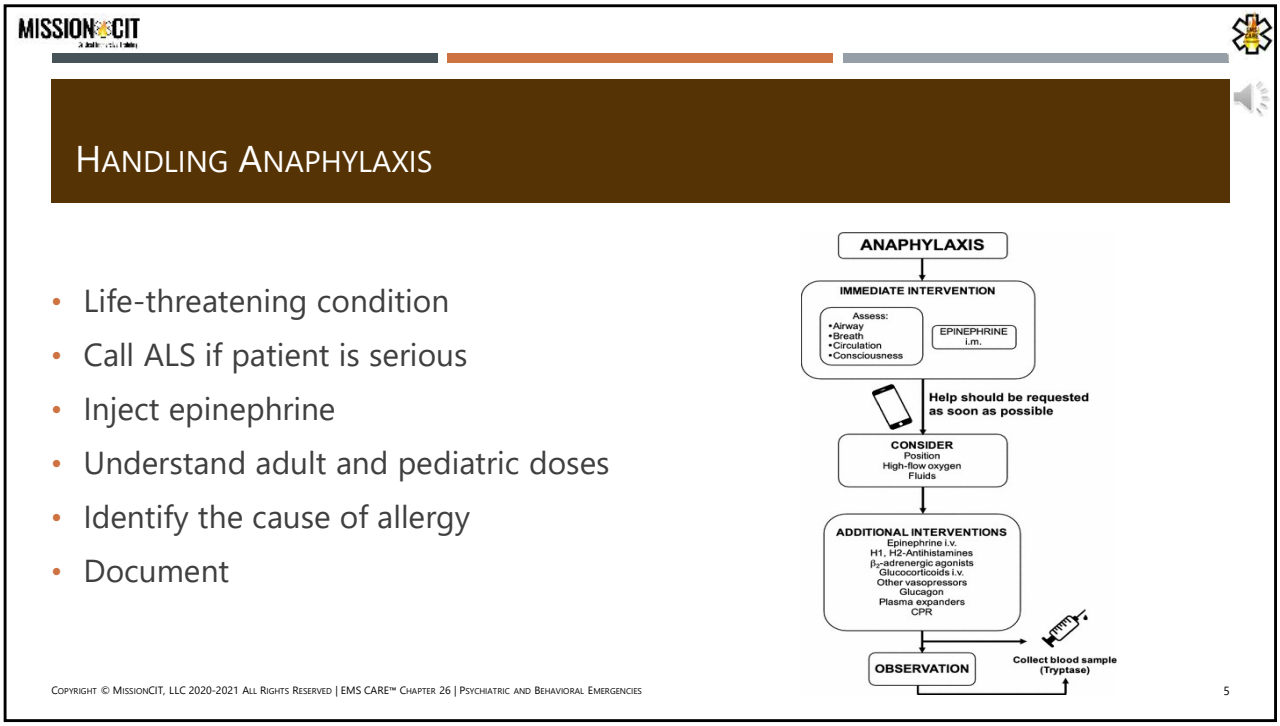


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Respiratory distress is a likely symptom of Anaphylaxis. There are three patterns or reactions of respiratory distress: monophasic, protracted, and biphasic.

Out of these, monophasic is the most common type, and it peaks within 30 minutes to one hour after the first allergic symptom occurs. On the other hand, a protracted reaction can last from hours to days, and these patients require treatment at the earliest sign. Research shows that 30% of patients with a lengthy response go into a circulatory shock, while 50% of patients develop acute respiratory failure.

Biphasic Anaphylaxis is a recurrence of Anaphylaxis after appropriate treatment. It happens with no additional exposure to the allergen. It is relatively rare and usually occurs within 72 hours after resolution of the initial anaphylaxis symptoms.



Anaphylaxis is a life-threatening condition and requires your intervention as an EMT.

As soon as you see the patient, perform your assessments. If you think the patient's allergic reaction is severe, have your partner advise medical control and ALS. In the meantime, inject Epinephrine. The intramuscular route is the best way. Be sure to repeat the dosage once every five to 10 minutes until the patient improves.

It is essential to understand that there are adult and pediatric doses, and understanding the difference is

critical. Regardless of age, injecting it in the lateral aspect of the thigh is most effective. If available, use an auto-injector as it is safe and injects the proper dose of the medication into the blood.

Once the patient is stable, do your best to determine the cause of the allergic reaction. Then be sure to document as it may help the hospital staff provide the most appropriate care.

With this, we have come to the end of this lesson. In the next, Missah will discuss the assessment and handling of immunological emergencies, including the use of Epinephrine.