Reaction Video Reflection

Pathophysiology of anaphylactic shock: Throughout this video I learned that Anaphylaxis is a severe systemic allergic reaction that stems from an individual's reaction to foreign materials introduced to the body. A process called degranulation results in histamines and other inflammatory mediators triggering reactions throughout the body such as rashes, itching, swelling, GI problems, breathing problems, etc. Anaphylaxis can result in symptoms throughout all body systems.

Anaphylaxis and the body's Physiologic Response/MOA: Throughout this video I learned that it is crucial for Epinephrine to be administered without delay in order to control the anaphylactic reaction. Epinephrine essentially reverses the effects of the reaction to allow time for transport and medical attention. One important concept is that in some anaphylactic cases multiple doses of Epinephrine might be needed to fully reverse the effects and prevent relapse- in which case it is important to monitor whether symptoms are improving after the first dose.

Why Do We Have Allergies? An allergy is a disorder in the immune system where your body releases defensive immunoglobin G antibodies after coming into contact with an allergen, which also produces the release of histamine throughout your body causing an anaphylactic reaction. One concept I found very interesting throughout this video was that allergies can be passed on through genetics, just like hair color, etc.

Anaphylactic Shock: The body's immune response to an allergen can be seen as a chain reaction. It can lead to decreased cardiac output and poor ventilation due to poor perfusion and airway obstruction which all leads to ineffective tissue perfusion, decreased tissue and cellular oxygenation. This ultimately results in impaired cellular metabolism. I learned in this video that symptoms do not always appear within minutes of coming into contact with an allergen, but that at times they may not appear for up to 1 hour and can even RE-appear within a 12-hour window. A crucial concept in this video is that among many interventions- Airway, Breathing, and Circulation (ABCs) are all crucial parts of treating an anaphylactic patient along with prevention, medical history, and early treatment to an allergic reaction.

Understanding Allergies: This video explained that in a person with allergies- their immune system recognizes harmless substances (allergens) as a potential threat to the body. I learned in this video that reactions to allergens often become worse after the initial introduction. Allergen specific antibodies are released after the first contact with the allergen and attach to immune cells which then quickly attack and attach themselves to the allergen upon the next interaction with the specific allergen- this results in an allergic reaction.