

Reactions Paper

One main concept with reactions is the process of anaphylactic shock. The pathophysiology of anaphylactic shock is related to a person's own body's reaction to a foreign material. The material introduced into the body interact with a part of the immune system, mast cells. Antibodies bind to the antigen. The antibodies that are bound to an antigen interact with mast cells. The mast cells will then release compounds in a process that is called degranulation histamines. This will trigger several symptoms as they travel throughout the body. These symptoms include hives, flushing, bronchial spasms, swelling, shortness of breath, wheezing. Symptoms can worsen to the point of asphyxiation. One in three patients may require 2 doses of epinephrine to counteract an anaphylactic reaction. If no symptom improvement occurs within 5 minutes, administer second dose. The antibody that is used is immunoglobulin E.

Decreased circulating volume and decreased venous return cause decrease cardiac output. This will ultimately lead to decreased cellular oxygen supply and impaired cellular metabolism. Anaphylaxis is a sever systemic reaction that can affect any number of organ systems. In anaphylaxis the cutaneous affects are usually seen first most in the face, mouth, and throat. Nurses should suspect an allergic reaction if a patient complains of itching and redness, or hives and swelling is seen. The patient may also appear restless, anxious, or apprehensive. In this situation it is important to ask questions to the patient or family to get a clear picture of what is going on, including any known allergies. There could hundreds of potential reasons for an allergic reaction. It is important to go to your ABCs, airway, breathing, and circulation to promote adequate tissue perfusion. Benadryl can be used to block the histamine response to relieve some the itching, swelling, and redness. Corticosteroids can also be given to prevent any delayed allergic reactions. One of the most important nursing inventions is for the nurse to use preventive measure to keep anaphylactic shock from occurring.