

Pathophysiology Concept Map

Assigned Alteration: Hypersensitivity Reactions

Why Does it Happen? Risk Factors

Hypersensitivity occurs due to the immune system reactions to “harmless” materials or substances.
They are otherwise known as “allergic reactions.”

What is Wrong? Pathophysiologic Alteration

There are four different types of hypersensitivity reactions.
Type 1 includes hay fever and food allergies, and is caused by IgE.
Type 2 is cytotoxic hypersensitivity, and caused by incompatible blood transfusion.
Type 3 is immune complex hypersensitivity. It usually is linked to autoimmune disorders, lupus, and rheumatoid arthritis.
Type IV is known as cell mediated or delayed hypersensitivity. It is caused by organ transplant rejection, contact dermatitis..

What Other Factors are Involved? Social Determinants of Health

The biggest social determinants of health is education and environment.
Education can teach individuals what to do when experiencing an allergic reaction.
Physical environment is extremely important. If there is an irritant or allergen, it poses direct danger.

How is it Diagnosed? Laboratory and Diagnostic Tests

Hypersensitivity reactions are diagnosed via prick, patch, or intradermal tests.
The level of IgE antibodies in the blood could also be used to determine if it is an allergic reaction.

What Cues Should the Person Have? Expected Findings

The most obvious signs of an allergic reaction are localized inflammation at the point of contact.
Other times, it could include wheezing, difficulty breathing, inflammation of the tongue (exacerbates difficulty breathing), and / or dizziness.

How can This be Prevented? Disease Prevention

Hypersensitivity reactions can be prevented by prescreening. This would let the patient know what to avoid, and how to treat themselves.
Taking prescribed medicines correctly would also help patients.

Are They Getting Better or Worse? Evaluating Changes in Health Expected Findings

Hypersensitivity reactions have the potential to end lives. After exposure, a client’s condition will progressively worsen unless treatment is administered. There is no way to fully prevent an allergic reaction, and thus treatment (administration of epinephrine) is the only option.