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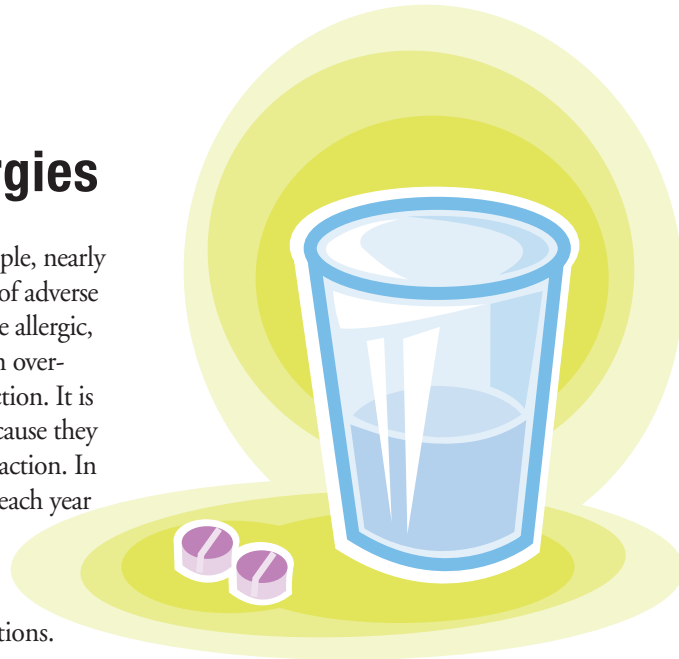
Patient Update

All about drug allergies



Although medications are given to help people, nearly all can have side effects. About 5% to 10% of adverse reactions to commonly used medications are allergic, which means that a person's immune system over-reacts to the drug and causes an allergic reaction. It is important to recognize allergic reactions because they can lead to anaphylaxis, a life threatening reaction. In fact, there are an estimated 106,000 deaths each year related to serious drug reactions.

Common drugs that cause a reaction

Most drugs occasionally cause allergic reactions. However, there are certain medications that are more likely to produce allergic reactions due to their chemical structure. They include:

- Antibiotics, such as penicillin
- Anticonvulsants and hormones, such as insulin
- Certain medicines used in anesthesia, such as neuromuscular blockers
- Vaccines and biotechnology-produced proteins, such as Herceptin

Symptoms of an adverse reaction

A severe reaction can occur when an allergic person's immune system produces the allergic antibody called IgE (immunoglobulin E) in response to a drug. When the person's body encounters the drug again, IgE antibodies bind to certain cells, called mast cells, and result in an explosive release of histamine and other chemicals. This triggers an allergic reaction. The most frequent types of allergic symptoms to medications include:

- Skin rashes, particularly hives
- Itching
- Respiratory problems, such as wheezing
- Swelling of areas of the body that have fat tissue, such as the face
- A severe, life threatening allergic reaction, called anaphylaxis

Symptoms of anaphylaxis

The most severe allergic reaction resulting from drug allergies is anaphylaxis. It requires emergency attention, including an immediate intra-muscular injection of epinephrine (adrenaline).The most common symptoms are:

- A sense of warmth or flushing
- Hives
- Swelling in the throat or wheezing
- Drop in blood pressure, leading to light-headedness
- Nausea or vomiting
- Abdominal cramping
- Shock, loss of consciousness, or death in the most severe cases

Treatment for drug allergies

When an adverse reaction to a medication is minimal, treatment is limited to discontinuation of that drug. If there is a more severe reaction that is ongoing, an allergist/immunologist may provide antihistamines, corticosteroids and other medications, including an epinephrine for emergency situations. Antihistamines block the effects of histamine, and corticosteroids reduce swelling and inflammation.

Patients with a drug allergy can often be given an alternative medication. When there is no alternative, yet the medication is essential, desensitization will be recommended. This involves gradually introducing the medication in small doses until the therapeutic dose is achieved.

Tell your doctor about any adverse reactions you experience when taking a medication, as well as any prior medication reactions. Give all of your health-care providers a complete list of your medications, including those that have caused a reaction. Talk to an allergist/immunologist about medications to avoid and alternatives that are safe to take.

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