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Editorial

Note on Treatment for Drug Allergies

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INTRODUCTION

Drug allergies are a form of side effect of drugs. Need to seek medical attention immediately if we suspect an allergic reaction. Initial exposure to a substance does not cause an allergic reaction. Upon initial exposure, the body can make antibodies to the antigen and memory lymphocyte cells. However, medicines often contain many different substances including dyes that can cause allergic reactions. This can cause an allergic reaction when the drug is first administered. For example, a person who is allergic to a red dye is allergic to all new drugs that contain the red dye [1-3].

Drug allergies occur when the body's immune system overreacts to substances in the drugs a person is taking, causing an allergic reaction. Penicillin is the most common cause of drug allergies. Other medications that commonly cause allergic reactions include other antibiotics, anesthetics and anti-inflammatory medications [4].

Treatment includes not taking the drug that is causing the reaction and taking the drug to relieve the symptoms. In severe cases, emergency medical care is required.

Causes of drug allergies

Drug allergies are associated with an immune response in the body that causes an allergic reaction to the drug. If we are taking the medicine for the first time, it may not be a problem. However, our body's immune system can produce substances (antibodies) against this drug. The next time when we take the drug, the antibody can instruct the white blood cells to make chemical called histamine. Histamine and other chemicals cause allergic symptoms. The medicines that cause common allergies are:

- Medicines used to treat seizures.
- Insulin (especially the source of insulin in animals).
- Iodine-containing substances such as x-ray contrast agents (these can cause allergic-like reactions).
- Penicillin and related antibiotics.
- Sulfa drug.

The side effects of most drugs are not due to allergic reactions caused by the formation of antibodies. For example, aspirin can cause hives or asthma without the immune system. Many people confuse drug allergies with the unpleasant but non-serious side effects of the drug such as nausea [5-7].

Symptoms of drug allergy

We may not experience allergic symptoms for the first time when we take a drug; our body could be producing antibodies to it. As a result, the next time we take the drug, our immune system may see it as an invader, and we will develop symptoms as our body releases chemicals to defend against it. These symptoms may include:

- Skin rash or hives
- Itching
- Wheezing or other breathing problems
- Swelling
- Vomiting
- Feeling dizzy or lightheaded

Anaphylaxis, a potentially life-threatening reaction that can impair breathing and send the body into shock; reactions may simultaneously affect two or more organ systems for example, when there is both a rash and difficulty breathing [8-10].

Penicillin causes most allergic drug symptoms. Just because we show allergic symptoms after taking penicillin doesn't mean that we will react to related drugs, such as amoxicillin, but it's more likely. Also, just because we had a reaction to penicillin or any other drug at one time doesn't mean we will have the same reaction in the future. Antibiotics containing sulfa drugs such as Septra, Bactrim and Pediazol can cause allergic reactions. Non-antibiotics, including sulfa drugs have a very low risk.

CONCLUSION

The main concern in the treatment of drug allergies is to relieve symptoms.

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- Common symptoms such as rash, hives and itching can often be controlled with antihistamines and in some cases, corticosteroids.
- Bronchodilators may be prescribed for coughing and stuffy nose.
- For more severe anaphylactic symptoms (life-threatening reactions such as dyspnea and loss of consciousness) and epinephrine (adrenaline) is usually injected. Desensitization is sometimes used to treat drug allergies, especially when tests are not available or feasible. This technology is designed to allow our body to withstand temporary allergen-causing medications as long as we continue to take the medication. For example, during penicillin desensitization and small doses of penicillin are gradually and regularly injected in large doses until the immune system learns to tolerate the drug. The desensitization procedure is not a cure for drug allergies.

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