



When is an allergy to an antibiotic really an allergy?

Many patients report allergies to antibiotics but often this will be based on vague symptoms or a historical entry in the clinical notes, which the patient cannot recall, e.g. a suspected allergy to penicillin during childhood. This can be a dilemma when a clinician does not want the patient to be deprived of the best available treatment, but is concerned about the risk of giving an antibiotic if the patient does in fact have an allergy.

Key points:

Most people who report an antibiotic allergy, e.g. penicillin, will not have a true allergy. If the history of allergy is not definitive, the starting point is to consider whether the details of the reported allergic event give any clues as to the true nature of the reaction:

- An allergy is an immunological reaction (IgE-mediated hypersensitivity) to a medicine. Symptoms and signs usually occur within one to two hours, and can include urticaria, angioedema, bronchospasm and anaphylaxis.
- A delayed immune reaction (IgG-mediated) can occur several days after antibiotic treatment is begun, and is generally characterised by a macular, papular or morbilliform rash.
- Adverse effects are the undesirable but predictable symptoms and signs associated with the pharmacological action of a medicine, e.g. diarrhoea, nausea and vomiting
- Intolerance is a sensitivity reaction to a medicine (non-immune mediated). It can be loosely defined as an unusually low threshold for experiencing the adverse effects of a medicine or an exaggerated expression of the adverse effects of a medicine, e.g. severe diarrhoea resulting in colitis with amoxicillin.

If the patient has a history of an acute IgE-mediated hypersensitivity reaction after taking an antibiotic, it can be assumed that this reaction is likely to occur again on re-exposure. Deliberate re-exposure to the antibiotic is not recommended unless the benefits of treatment outweigh the risks. In most cases alternative classes of antibiotics will be available and can be used instead.

If the patient has a history of a delayed hypersensitivity reaction after taking an antibiotic, re-challenge may be possible, depending on the nature of the reaction.

If the patient has a history of intolerance or adverse effects after taking an antibiotic, it depends on the severity of the symptoms or signs as to whether this is a contraindication for taking the medicine in the future.



To read the full article, visit:

www.bpac.org.nz/bpj/2015/june/allergy.aspx