

Madigan Army Medical Center

Referral Guidelines

Drug Allergies

Diagnosis/Definition

- An adverse reaction to a medication. May be immune or non-immune mediated. The most common reaction is a pruritic maculopapular skin rash but presentation can be varied. It can also include anaphylaxis and many other organ systems including hepatic, renal, cardiovascular, pulmonary, musculoskeletal, and hematopoietic. Drug fever is another potential manifestation.

Initial Diagnosis and Management

- Physical examination to characterize rash, mucosal abnormalities, or articular findings.
- History of a drug exposure which correlates temporally with symptoms or laboratory abnormality. Be aware that the reaction can start after the medication has been stopped.
- A CBC may provide supportive information if eosinophilia or other hematologic abnormalities are identified. Renal function and liver enzyme levels may be helpful if involvement of those systems is thought to be present. If the reaction was anaphylaxis a tryptase level to confirm massive mast cell degranulation may be helpful.
- Chest x-ray for pulmonary hypersensitivity reactions.

Ongoing Management and Objectives

- Discontinue medications suspected of causing the reaction.
- Find alternative but dissimilar medications for those that are critical for management.
- Milder, typically cutaneous reactions can be controlled by prescribing antihistamines and, if required, corticosteroids.
- If manifestation of drug allergy is anaphylaxis, it should be treated immediately with epinephrine 1/1000 0.3mg IM for adults and children > 65lbs and 0.15mg for children < 65 lbs

Indications for Specialty Care Referral

- Local anesthetics - clinically significant reactions are very rare. We can test/challenge to ascertain if the reaction was from the local anesthetic.
- NSAID hypersensitivity may be present with any of the non-steroidal anti-inflammatory agents. No standardized testing is available. Rarely, desensitization is indicated and referral for assistance with a desensitization protocol is warranted.
- IV contrast – Mechanism for anaphylactoid reactions to IV contrast is not immune mediated. For patients with history of anaphylactoid reaction to IV contrast adequate pretreatment with corticosteroids and antihistamine with use of hypo-osmolar contrast material is standard of care. Referral is not needed. Atopic patients (to include seafood allergy, asthma) have a small increased risk of anaphylactoid reactions but do not require pre-treatment if no history of previous reaction to IV contrast. History of contact dermatitis to topical iodine preparations is not associated with any increased risk of reaction to IV contrast.
- Antibiotics – standardized testing is currently no longer available for penicillin, Alternative antibiotics should be used. No accepted skin testing protocols are available for other antibiotics

as well. IN GENERAL, SKIN TESTING TO ESTABLISH THE CERTAINTY OF DRUG ALLERGY IS USELESS SINCE IT DOES NOT ELIMINATE THE POSSIBILITY OF A SYSTEMIC REACTION. Positive and Negative predictive value are poor.

- Drug desensitizations: If a medication is needed and there is no alternative, we can help with a desensitization protocol. For antibiotics consultation with Infectious Disease should be sought prior to pursuing desensitization as there are still risks of severe reaction with desensitization. For many drug desensitization protocols hospitalization for close monitoring is required. Desensitization is only effective for the course of the current drug. Benefit is lost after the medication is discontinued.
- Immunizations – large local reactions are a common side effect of many vaccines and are not an indication of allergy. Systemic anaphylactic reaction to vaccines should be referred and confirmation of allergy with testing can be done. The amount of egg antigen in flu vaccine is very small and most egg allergic people can receive this vaccine. Referral for testing should be considered rather than not giving immunization.
- Assistance is available in evaluating peri-operative anaphylaxis.

Criteria for Return to Primary Care

- Completion of skin testing, if indicated, and challenge or desensitization as necessary.
- Acute antibiotic desensitization should be performed under monitored conditions and this is best done through the collaborative efforts of the primary physician and Infectious Disease. It is only considered when there is no alternative antibiotic choice.

Last Review for this Guideline: **October 2009**

Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
Clinical Practice and Referral Guidelines Administrator