# Inpatient Amoxicillin Oral Drug Challenge – Information for Nursing

Your patient has been identified as having a penicillin allergy. While penicillin antibiotics are one of the most common medication allergies, nearly 90% of people who report a penicillin allergy do not have a true IgE mediated allergic reaction. This misconception results in using non-preferred antibiotics, leading to antimicrobial resistance and treatment failure. The clinical pharmacy and medicine teams are making an effort to remove the penicillin allergy label from your patient’s chart. This will be done by performing a drug challenge. Based on previous reaction history, your patient is considered to be at low risk of reaction and can undergo a drug challenge with amoxicillin to safely and effectively rule out a penicillin allergy. Please follow additional steps below for your role in the process.

Process:

1. Communicate with the patient that the oral challenge for penicillin allergy testing is starting. A pharmacist has already educated patient on the process and patient provided consent.
2. Administer amoxicillin 500 mg PO x 1 dose and document in BCMA as usual.
3. Please be available (or have a counterpart available) in the unlikely event of an adverse reaction.

* Observe patient every 30 minutes for 60 minutes for immediate reactions.
  + Immediate reactions may include itching, rash, hives/urticaria, shortness of breath, angioedema or anaphylaxis.
* It is not required that you document vitals during this time.

1. After 60 minutes, the testing period is complete. The pharmacist will be available for follow-up with you and the patient.

In the rare event of an adverse reaction:

* Mild (rash or itching): Call primary team
* Moderate/Severe (anaphylactic reaction or breathing or cardiovascular issues): Initiate rapid response



* *Pharmacist will addend procedure note and ABLE note with any relevant information.*

# Characteristics of Immediate (IgE-mediated) Reactions:

* Reactions that occur immediately or usually within one hour
* Hives: Multiple pink/red raised areas of skin that are intensely itchy
* Angioedema: Localized edema without hives affecting the abdomen, face, extremities, genitalia, oropharynx, or larynx
* Wheezing and shortness of breath
* Anaphylaxis

# Risk Stratification:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **LOW RISK** | **INTERMEDIATE RISK** | **HIGH RISK** |
| **REACTION HISTORY** | * Mild reaction (e.g., maculopapular drug eruption, pruritis) * Unknown reaction (≥ 10 years ago) without clinical features of IgE * No cardiac or pulmonary instability | * IgE-mediated reaction, but not anaphylaxis\* * Anaphylaxis\* (> 10 years ago) * Low-risk reaction WITH cardiac or pulmonary instability | * Anaphylaxis\* < 10 years ago * Positive PCN skin test in the last five years |
| **TESTING** | Abbreviated PO amoxicillin  challenge (i.e., for inpatients or in the ED)  (1) 500 mg x1  (2) Monitor for 1 hour |  |  |
| **RESULT** | * Negative PO challenge: *remove allergy* * Positive PO challenge: Use alternative agents |  |  |

*Adapted from VA ABLE Implementation Toolkit*

\*Anaphylaxis is defined as a severe, potentially fatal, systemic allergic reaction involving at least 2 organ systems that occurs minutes to hours after contact with an allergy-causing substance.