hospital pharmacists: *be antibiotics aware* Verify Penicillin Allergy

SCENARIO

You are verifying an aztreonam order for a patient who has a penicillin allergy listed in his medical chart.

Although 10% of the population in the U.S. reports a penicillin allergy, less than 1% of the population is truly penicillin allergic. Correctly identifying if your patient is penicillin allergic can decrease the unnecessary use of broad spectrum antibiotics.^{1,2,3}

Pharmacists can help verify penicillin allergy by:



1. Asking questions to evaluate if the patient is truly penicillin allergic.

- ✓ What medication(s) were you taking when the reaction occurred?
- ✓ Can you describe the symptoms you experienced?
- ✓ How long ago did the reaction occur?
- \checkmark How was the reaction managed? What was the outcome?
- Have you been prescribed amoxicillin or another penicillin since your reaction? Did you tolerate the antibiotic?



2. Reviewing the patient's health record to obtain previous prescription history.

If the patient has tolerated a penicillin or cephalosporin in the past, aztreonam may not be necessary.



3. Discussing your findings with the ordering provider.

Consider preparing a list of alternative agents to discuss with the provider. Refer to your facility's penicillin allergy evaluation protocol, if applicable.

You can apply this action plan to other antibiotics that are initiated for penicillin allergy (e.g., fluoroquinolones, clindamycin).

The scenarios and recommendations discussed are applicable to most immunocompetent adult patients. Prior to making interventions, always assess the individual patient and use your clinical judgment. Follow your institution's treatment guidelines when applicable.

References:

- 1. "Is It Really a Penicillin Allergy," Centers for Disease Control and Prevention, https://www.cdc.gov/antibiotic-use/community/pdfs/penicillin-factsheet.pdf.
- 2. Trubiano J, Phillips E. Antimicrobial stewardship's new weapon? A review of antibiotic allergy and pathways to 'de-labeling'. Curr Opin Infect Dis. 2013;26(6):526-37.

3. Swearingen SM, White C, Weidert S, Hinds M, Narro JP, Guarascio AJ. A multidimensional antimicrobial stewardship intervention targeting aztreonam use in patients with a reported penicillin allergy. Int J Clin Pharm. 2016;38(2):213-7.





www.cdc.gov/antibiotic-use