NURSES TAKE ANTIBIOTIC STEWARDSHIP ACTION INITIATIVE





Improving Documentation of Penicillin Allergy Histories

Key Points:

- Careful evaluation of antibiotic allergy and prior tolerance history is essential to providing optimal treatment
- Alterations in antibiotic prescribing due to reported penicillin (PCN)
 allergies results in an increased risk of clinical failure and surgical site
 infection
- About 10% of the US population reports a PCN allergy
 - Most PCN allergies are not true allergies (>95%)
 - The most common allergy is a delayed-type rash that does not preclude subsequent receipt of PCN or other antibiotics in the PCN family
 - Anaphylaxis to PCN is extremely rare (<0.01%)
- Most allergies in the medical record lack documentation as to the nature and severity of reaction
- The degree of cross reactivity among antibiotics in the PCN family varies by agent so obtaining specific information about what antibiotic caused a reaction, what the reaction was, and what other antibiotics the patient has received is important

How Can Nurses Help Mitigate This Problem?

- Obtain and document and accurate history of the reaction for all antibiotics that a patient reports an allergy to an what other antibiotics they have received
- See <u>algorithm</u> to assist you in obtaining and documenting an accurate PCN allergy history

References

- Blumenthal et al. The Impact of a Reported Penicillin Allergy on Surgical Site Infection Risk. Clinical Inf. Dis. 2018.
- McDanel et al. Comparative effectiveness of beta-lactams versus vancomycin for treatment of methicillin-susceptible Staphylococcus aureus bloodstream infections among 122 hospitals. Clinical Inf. Dis. 2015.
- Jeffres et al. Consequences of avoiding β -lactams in patients with β -lactam allergies. J Allergy Clin. Immunol. 2016.
- Shenoy ES et al. Evaluation and Management of Penicillin Allergy: A Review. JAMA. 2019.