Antimicrobial Stewardship Matters
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Does your patient truly have a penicillin allergy?

The facts

- Allergies change over time and **80 per cent** of patients with a true IgE-mediated penicillin allergy will lose it after 10 yrs.[1]
- In patients with a documented penicillin allergy, less than five per cent are truly allergic.[1,2]
- Beta-lactam (β-lactams) antibiotics remain one of the safest and most effective antibiotics and should be used first line whenever possible.[2,4,10]

Why is it important?

The use of alternate and broader antibiotics in patients labeled with a penicillin allergy is associated with **poorer patient outcomes, increased risk for antibiotic resistance** and **higher healthcare costs** (including length of stay and readmissions). [1,2,4,10]

- 14 per cent increase in risk of death[3]
- 11.3 per cent increase in risk of treatment failure[4]
- Three-fold increase risk for adverse outcomes[4,11]
- 69 per cent increase in risk of methicillin resistant *Staphylococcus aureus*[5]
- 26 per cent increase in risk of C. difficile infection[5]
- 50 per cent increase in risk of surgical site infections[2,6]

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Alberta Health Services
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What can you do?

Take an accurate allergy history

Differentiate side effects (eg. headache, diarrhea, yeast infection etc) vs allergy symptoms (hives, angioedema, bronchospasm, hypotension etc).

Pen-FAST is a simple validated patient interview tool to identify low risk patients that can be given a direct oral penicillin challenge and have their penicillin allergy de-labeled.[8,9,12]

Don't shy away from using another β-lactam

Even in patients with a confirmed penicillin allergy, cross reactivity between β-lactams is related to side-chain structures and is only one to two percent between penicillins and cephalosporins if side-chains are different.[2,7,10]

Cefazolin's side chain is unique and does not cross react with any other β-lactam.[9,10]

References are available upon request.

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