Infectious Diseases Physician Management of Antibiotic Allergies

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Poster # 811

Objectives

- Antibiotics are a common cause of drug allergic reactions in adults and children.
- Up to 25% of patients who require antimicrobial therapy report allergic reactions to at least one agent.
- Approximately 10% of patients report penicillin allergy, but up to 90% of these patients tolerate penicillin (PCN) and are unnecessarily designated as "allergic".
- Misconceptions about the definition of true antibiotic allergy among patients and prescribers are common and often lead to the use of alternative antimicrobial therapy with the potential for suboptimal efficacy, increased healthcare costs, and adverse events (including potential selection for antibiotic resistance).

Methods

- Participants:
  1. 411 adult and pediatric infectious disease (ID) physicians who are members of the Infectious Diseases Society of America (IDSA) in the USA and Canada.
  2. The EIN is funded by the CDC and sponsored by IDSA.

Results

- 744/1413 (53%) respondents

  - 537 (72%) respondents practiced ID in adult patient settings, 170 (23%) in pediatric settings and 37 (5%) in both.
  - 582 (78%) had been consulted at least once in their past month of clinical service about the antibiotic management of patients with reported antimicrobial allergy.
  - Most useful questions for identifying a patient with an antimicrobial allergy when taking a medical history: (1) if the patient had previously taken the same antibiotic or a different agent from the same class, and (2) characteristics of the reaction.

- 405 (60%) reported that PCN skin testing was available at their practice setting. Skin testing was performed by allergy/immunology (362 (90%) respondents).

- 268/357 (75%) reported that, despite availability, PCN skin testing was not routinely performed for elective surgical cases.

- 628/670 (94%) respondents each selected more than one antibiotic option

Conclusions

- Infectious diseases physicians are frequently consulted for the management of patients with suspected or proven antibiotic allergies.
- There is limited availability of PNC skin testing and allergy/immunology specialists to test for antibiotic allergies.
- Vancomycin continues to be inappropriately used in clinical practice, particularly for patients reporting an allergy only to PCN.
- Antimicrobial stewardship is an important resource to guide the management of patients with antibiotic allergies.
- Further studies are needed to evaluate the impact of antimicrobial allergies on antimicrobial stewardship.
- According to almost all respondents IDSA guidelines focused in this topic could be an important resource to guide the management of patients with antibiotic allergies.

Background

- Antibiotics are a common cause of drug allergic reactions in adults and children.
- Up to 25% of patients who require antimicrobial therapy report allergic reactions to at least one agent.
- Approximately 10% of patients report penicillin allergy, but up to 90% of these patients tolerate penicillin (PCN) and are unnecessarily designated as “allergic”.
- Misconceptions about the definition of true antibiotic allergy among patients and prescribers are common and often lead to the use of alternative antimicrobial therapy with the potential for suboptimal efficacy, increased healthcare costs, and adverse events (including potential selection for antimicrobial resistance).

Figure 1: Reported Barriers*** to the Implementation of B-lactam Allergy Testing. (N=402)

To describe how infectious diseases physicians (ID) identify and manage patients with reported antibiotic allergy and availability of penicillin allergy skin testing.

- Most useful questions for identifying a patient with an antimicrobial allergy when taking a medical history: (1) if the patient had previously taken the same antibiotic or a different agent from the same class, and (2) characteristics of the reaction.

- Availability of penicillin skin test materials

- No one available to perform test

- Lack of proven usefulness of test

- Concern for safety of skin test

- Cost / low reimbursement

- Legal concerns with skin test & use of penicillins

- Patient resistance to testing

- Mean

- Median

- Important

- Most important

- Least important

- Bar charts reported by 269 (31%) respondents.