



POSTER PRESENTATION

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Quality of penicillin allergy management in the intensive care unit and internal medicine ward

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Background

Penicillin allergy is reported by 10% of the population [1]. The associated morbidity is substantial given its medical and economic implications [2-4]. The aim of this study was to assess the quality of care with regards to the management of penicillin allergy in a university affiliated general hospital with no allergy service.

Material and methods

All admissions from December 1st 2008 to December 1st 2009 were hand reviewed for a notion of penicillin allergy. Files were then assessed for (1) quality of allergic history to penicillin, (2) referral to an allergy clinic upon discharge, (3) indications for such a referral, (4) indication for a beta-lactam, and in the latter case, (5) management of antibiotic therapy.

Results

Of the 1738 files reviewed, 172 contained a notion of alleged penicillin allergy. History of the reaction to penicillin was poorly detailed even when patients required beta-lactam therapy (table 1). In the 87 patients who did require a beta-lactam, half received it without any skin testing, challenge or desensitization. No adverse reaction occurred. The main antibiotics used in the remaining patients were fluoroquinolones and vancomycin. Decision-making concerning the choice of antibiotic was documented in only 18%. Upon discharge, only two patients were referred to an allergy clinic for elective penicillin skin testing, even though referral was strongly indicated in 97 patients (table 2).

Table 1 Details included in allergy history

	All patients (n=172)	Patients with indication for beta-lactam (n=87)
Allergy to penicillin noted in admission note	139 (81%)	69 (79%)
Allergy tag on file	119 (69%)	66 (76%)
Molecule specified	31 (18%)	23 (26%)
Allergic reaction described	52 (30%)	27 (31%)
Delay since reaction noted	7 (4%)	5 (6%)
Treatment of allergic reaction noted	0	0

Conclusion

Penicillin allergy is a frequent problem in hospital practice. Its management is not optimal in most cases. This study stresses the importance of continuous medical education on this subject and the importance of a readily available inpatient allergy service to support hospital practitioners.

Table 2 Strong arguments for allergy referral.

Argument	Number of patient (n=172)
Allergy to a non beta-lactam antibiotic	37 (22%)
Immunosuppressive treatment	15 (9%)
Chronic disease (COPD, CKD on dialysis, complicated diabetes)	85 (49%)
Admitted for acute infection	72 (42%)
Planned surgery	49 (28%)
Any	128 (74%)
Any and survived hospitalisation	97 (56%)

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