Reviewer's report

Title: Eosinophilic Pneumonia Associated with Daptomycin: A Rare Case and Literature Review

Version: 1 Date: 27 May 2010

Reviewer: Vasilios Papaioannou

Which of the following best describes what type of case report this is?: Unreported or unusual side effects or adverse interactions involving medications

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

General comments
This is a well written report of a case that describes the occurrence of an inflammatory response in a patient who was hospitalized for possible infective endocarditis (IE). The authors have managed to present in a concise way the history, diagnostic procedures and therapeutic management during the patient's stay in the hospital. However, there are some issues that have to be addressed concerning their hypothesis that daptomycin was the causative agent of the inflammatory response that they call eosinophilic pneumonia (EP).

Revisions necessary for publication
Case presentation, third paragraph
The authors state that the patient developed a febrile response 10 days after initiation of antibiotic therapy for IE, with bilateral retico-nodular infiltrates on chest X-ray and ground-glass peripheral opacities on chest CT. Did they perform high resolution CT or a conventional one? What was their differential diagnosis that led them to study auto-immune markers before performing bronchoscopy with BALF examination?

Discussion, third paragraph

The authors state that there are 5 cases of reported EP due to daptomycin. They reference 4 whereas the reported cases are truly 7.

Since the patient was receiving 5 antibiotics before establishment of EP diagnosis, why the authors seem so convinced that their case was attributed to daptomycin after discontinuation of all antimicrobial agents? They should at least discuss this issue and comment on the relation between ampicillin and pulmonary inflammation.


They should also cite the website: www.pneumotox.com that discusses drug adverse effects related to lung diseases.

The reported cases in the literature consider this side effect of daptomycin as an acute eosinophilic pneumonia based on the Solomon and Swartz criteria, which have to be included in the discussion. Moreover, a severe respiratory failure seems indispensable, among other criteria such as eosinophil count in BALF, for permanent diagnosis. I am concerned about the absence of clinical findings that could be associated with a clinical entity named 'pneumonia' of whatever cause.

Discussion, fourth paragraph

The authors should discuss in more detail the pathophysiological mechanisms that seem to be responsible for the pathogenesis of externally caused EP.

References

In references 3 and 11, dates of publication are missing

Quality of written English: Acceptable

Declaration of competing interests:

I declare that i have no competing interests