Reviewer's report

Title: Corynebacterium mucifaciens in an immunocompetent patient with excavated pneumonia

Version: 1 Date: 29 August 2010

Reviewer: Werner C. Albrich

Reviewer's report:

This manuscript is a case report of an apparently immunocompetent patient with cavitary pneumonia due to Corynebacterium mucifaciens. This is interesting since C. mucifaciens has only recently been identified as a new species and only few reports have confirmed its pathogenic potential in humans so far. It may be the first reported case of a cavitary pneumonia due to this organism.

Major Compulsory Revisions:

Case report, 2nd paragraph:
1. Acid production from maltose is not reported with C. mucifaciens according to Funke G, Bernard KA. (page 482) in the Manual of Clinical Microbiology, 8th ed. Please comment since the species determination was apparently not straightforward and the literature is confounded by misclassification of coryneform bacteria.

Minor Essential Revisions:

Case report, 1st paragraph:
2. “…country of origin.” (instead of “genuine country”).
3. how was HIV infection ruled out? Please clarify (HIV test?)
4. were there any comorbidities (in particular immunosuppression) of the patient, any coninfections, did he take medications (in particular steroids)? Was there a smoking history, history of alcoholism, drug exposure? Did the patient have sick contacts? Contacts with animals (you mention later on that he had exposure to horses and horse premises: I suggest you mention this here and possibly in more detail)? Any particular hobbies? What was the travel itinerary? What was he doing in the Maghreb, visiting friends and family; were they sick?
5. What was the time interval between travel and onset of symptoms?
6. If a procalcitonin value is available, please report it.

Case report, 2nd paragraph:
7. “…alkaline phosphatase, “

Case report, 3rd paragraph:
8. What was the dosing of the antibiotic therapy?
9. Please describe the outcome of the patient in more detail (clinical resolution?)
Radiographic course if available? Any residual disease?

Discussion, 1st paragraph:
10. “…cultures obtained…” (instead of “made”)

Discussion, 2nd paragraph:
11. “…coryneform bacteria…” (not capitalized)
12. “Thereby, a potential critical issue…”

13. It maybe interesting to summarize previously reported risk factors and exposures for patients with C. mucifaciens, the geographic areas where infections were reported, treatments and outcomes of patients. Was ever horse exposure reported?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

'I declare that I have no competing interests'. Werner C. Albrich, MD, MSCR