Reviewer's report

Title: Actinobaculum schaalii - invasive pathogen or innocent bystander?: a retrospective observational study

Version: 1 Date: 31 May 2011

Reviewer: Dasja Pajkrt

Reviewer's report:

In this retrospective case description study, the clinical significance of Actinobaculum schaalii presence as detected by urine culture of Gram-positive catalase negative rods and by 16S RNA PCR. This is a very nice study as it shows that Actinobaculum schaalii can not only cause urinary tract infections (as has been shown in the past), but may at least play a contributive role in deep skin infection and even bone infections; thus this study helps to increase our insight in the role of A. schaalii as a pathogen in human infections.

There are however some considerations that should be taken into account.

Major compulsory revisions.

1. I believe table 4 provides no added value. I would suggest to either simplify the table (categorizing only the antibiotic treatments into main groups, with duration of treatment depicted as: for example duration with amoxicillin/clavulanic acid ranged from 5-61) or simply described the data in the text

Minor essential revisions:

2. The most striking issue I found is the low number of isolates with detection of A. schaalii in such as big tertiary center in Switzerland; only 40 isolates were detected. Could the authors indicate what percentage of positive isolates from patients whose cultures were detected from any sterile body site? In the event the authors cannot reproduce these numbers from all positive cultures from sterile body site, please elaborate in the discussion section more on the low numbers of isolates of A. schaalii.

3. Another reason for the low numbers of A. schaalii isolates could be that the urine were only cultures for 2 days (as is routine practice), but it is know that it may take more than 2 days for A. schaalii to grow even in 5% CO2 . Why was the cultivation not prolonged to at least 3 days?

Minor consideration:

1. I would suggest another English language check.

2. Textual revisions:
   a. urin should be urine in the tables.
   b. Discussion: “Cattoir et al described similar results when testing 48 clinical isolates” please change this sentence, this is not proper English
c. Discussion: "Bank et al. analyzed……, " please change this sentence, this is not proper English.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**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