Reviewer's report

**Title:** Actinobaculum schaalii an emerging pediatric pathogen?

**Version:** 1  **Date:** 18 May 2012

**Reviewer:** Steffen Bank

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About the article

In the last few years A.schaalii has been established as an underdiagnosed uropathogene especially among the elderly. However, only a few articles adress the issue among children - especially toddlers who still use dipers. This article is a valuable additive to the sparse information of A.schaalii infections in young children where A.schaalii probably also is underdiagnosed.

The optimal duration or antibiotic treatment for A. schaalii infection is currently unknown and therefore this study adds valuable information by supporting that amoxicill can be effective for treating A.schaalii infections.

The table provide a nice overview of UTI caused by A. schaalii in children.

I highly recomend that the article is published.

**Major corrections:**

In discussion you write: "There is limited data from in vitro susceptibility testing suggesting that gentamicin, vancomycin, linezolid, and nitrofurantoin are potential alternative treatment options [5]."

You should complete the list by adding mecillinam which has been examined in a supplementary study to reference 5 [22]. Pivampicillin is widely used in the scandinavian countries.


**Minor corrections and comments:**

Abstract/Background: 16S rRNA sequencing is usually slow. Since new techniques like real-time PCR and Maldi Toft allow fast identification it could be interesting to know how many days went before you got the 16S rRNA result (if you have the data)?

" Sequencing of the 16S rRNA gene confirmed an A. schaalii infection XX day later."

Key words: I just wonder why you use "Urinary Tract" instead of "Urinary Tract
Infections”.

In discussion you write: "The optimal duration of antibiotic treatment for A. schaalii infection is currently unknown. Most case reports suggest a treatment duration of seven to 14 days."

Either write seven to fourteen days or 7 to 14 days.

In discussion you write: "Implementation of the newer technology MALDI-TOF in routine diagnostic procedures will allow a fast and easy identification of A. schaalii and might change its the frequency of detection."

This sentence has to be corrected.

In discussion you write: "Incubation may need 48 to 72 hours as a result of its slow growth and 16S rRNA sequencing is required for identification."

I think you should emphasize that it requires incubation in CO2.

In discussion you write: ".... PCR for A. schaalii from urine was positive in 36% (5 of 14) of children below three years of age but negative in all 15 children tested between three and 15 years of age."

Either write all numbers with arabic nummerals or all with letters (do not change "36% (5 of 14)").

In the abstract, Case presentation, you write:" Urinalysis showed leukocytosis....."

I might be wrong, but how does Urinalysis relate to leukocytosis? Can you clarify the sentence?

Definition: Leukocytosis is a raised white blood cell count (the leukocyte count) above the normal range in the blood.

Background, you write:" Like other Actinomyces-like organisms it is suspected to be part of the commensal flora of the human urogenital tract."

You should add a reference to this sentence. You might have taken that information from your reference 1!!

In case representation you write:" (Becton Dickinson AG, Basel, Switzerland and a Columbia-Colistin-Nalidixic acid agar (CNA)"

I belive it should be (CNA) not (CAN). You also use CNA (correct) two lines later.

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

**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.