Reviewer’s report

Title: Anterior cervical corpectomy and fusion for blastomycosis osteomyelitis causing destruction of C6 vertebrae: A case report.

Version: 3 Date: 19 March 2015

Reviewer: Dimitrios Farmakiotis

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

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?: Yes

Does the case report have explanatory value?: Yes

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:

Patel et al report an unusual and interesting case of cervical osteomyelitis caused by Blastomyces. This is an interesting case report, and acceptable for publication in this journal. Some comments that would make the manuscript even more sophisticated:

I would tone down a little bit the risk of placing hardware in actively infected bone tissue. Even though the authors’ concerns for seeding and the possibility of biofilm-related, hard-to-treat hardware infection are valid, I think most clinicians would agree that the stability of cervical spine would take priority no matter what the causative organism is. That would likely apply to glycocalyx-producing fungi, as well, and the authors might like to rephrase the pertinent parts of their manuscript.
Lines 55-58: I don't think the laboratory values add a lot to the case report, unless the authors want to make a point that the low WBC would argue against a bacterial process.

Lines 65-68: How did the authors handle the interaction between rifampin and itraconazole at the time of co-administration? How long were the two medication co-administered? What were the itraconazole levels? Was the itraconazole dose adjusted?

Same part: Was there any other evidence of TB? Positive PPD or IGRA?

Was the patient's HIV status tested?

Line 111: "Urine antigen testing has been reported to have sensitivity and specificity of 92.9% and 79.3% respectively". Is that for all forms of blastomycosis? Usually the diagnostic utility of urinary antigens for Blastomyces and Histoplasma is higher in the disseminated forms. The authors might want to specify further. Maybe one of the teaching points if this case report from the diagnostic perspective is that urine Ag is not very sensitive for the diagnosis of localised forms, osteoarticular infections in specific.

The authors might want to comment briefly on the mode of transmission and the pathogenesis of Blastomyces osteomyelitis.

Lines 120-125: Itraconazole can sometimes have tenuous pharmacokinetics, and can also cause a mineralocorticoid excess-like syndrome with hypertension. The authors might like to comment on the utility of the newer triazoles voriconazole and posaconazole as alternatives.

Last but not least, it would be nice if the authors could provide some pictures of the histopathology slides showing the Blastomyces forms.

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

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

Declaration of competing interests:

No conflict of interest to report