Reviewer's report

Title: Clinical challenge: Fatal mucormycotic osteomyelitis caused by Rhizopus microsporus despite aggressive multimodal treatment

Version: 1 Date: 23 June 2014

Reviewer: Sarah Taimur

Reviewer's report:

1: Correction needed in spelling (several places in the manuscript)
   - Incorrect: Rhizopus microspores
   - Correct: Rhizopus microsporus

2: Line 34:
   Would give % incidences of sinus, pulmonary, skin, and rhino cerebral disease.

3: Please define “comprehensive osteomyelitis”

4: Lines 64-67:
   Please revise sentence to provide more clarity. Line 66-67 are not clear in context of the previous lines, 64-65.

5: Lines 102-104
   Please clarify. You say “Computed tomography (CT scan) revealed bilateral infiltrations referring to atypical pneumonia. Thus lumbar discitis was ruled out by magnetic resonance imaging (MRI).” In the context of presentation with respiratory failure, what lead to suspicion and investigation of lumbar discitis?

6: Line 116
   Please define/clarify: “Comprehensive bone and soft tissue destruction”.

7: Line 126:
   Please specify which aspect of the thigh got worse?

8: Were blood cultures performed? If so, what were the results?

9: Was cardiac echocardiography performed? If so, what were the results?

10: You mention fungal markers were done. What were these fungal markers and their results?

11: Avoid use of trade names for medications. Would review manuscript and change to generic names.

12: Generic names do not need to captialized. Would review and change.

13: The manuscript contains very useful information and the figures are extremely useful in particular. The write up however needs extensive revision with orderly presentation of findings in the case write up as well as discussion. For example: Page 7-8, the discussion starts with zygomycetes introduction as a class which is appropriate but then goes to rhizopus microsporus, back to order
mucorales. Would introduce in discussion the class, the order and then talk about genus and then species (i.e. Rhizopus microsporus).

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

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests - S Taimur, M.D.