Reviewer’s report

Title: Rapid Diagnosis of Propionibacterium acnes Infection in Patient with Hyperpyrexia after Hematopoietic Stem Cell Transplantation by Next-Generation Sequencing: A Case Report

Version: 0 Date: 30 Aug 2015

Reviewer: Ricardo Gianecini

Reviewer's report:

Propionibacterium acnes is a major inhabitant of adult human skin. This bacterium is usually responsible for late chronic infections but, exceptionally, could produce acute infections, mainly related to any device. P. acnes is a common contaminant of cultures, and interpretation is difficult when it is isolated from a single specimen. Moreover, P. acnes can be difficult to isolate because of its slow growth and anaerobic requirements. Molecular methods have been found to be advantageous in situations in which conventional methods are slow, time-consuming or not available. In this study, the authors have detected Propionibacterium acnes, using next-generation sequencing technology, from the blood sample of an immunocompromised patient as the causative agent of systemic infection. In general, the case report is well written and structured. I only have few comments, but I observed the lack of details about the samples and cultures used.

Specific comments:

Line 5 to 7 (Page 4): The patient suffered from fever with mild cough. Blood cultures should be obtained for any patient, in whom there is suspicion of bacteremia or fungemia. Did the authors take blood for cultures? This point has to be clarified

Line 6 to 14 (Page 5): The computed tomography of chest showed pneumonia in the posterior basal segment of the lower lobe of right lung. Could the authors identify the cause of pneumonia?

Lines 48 to 50 (Page 6): Related to a previous comment, please clarify how many samples were used.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes
Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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