Reviewer’s report

Title: Group B streptococcus is the most common pathogen for septic arthritis with unique clinical characteristics: Data from 12 years retrospective cohort study

Version: 0 Date: 13 Jun 2019

Reviewer: Takeaki Wajima

Reviewer's report:

In this manuscript, Ruksasakul et al. compared septic arthritis caused by GBS with septic arthritis caused by other bacteria. I believe that the findings of this study are valuable for improving our understanding of septic arthritis and will be of interest to readers; however, the methodology followed by the authors has several issues. I would suggest the authors revise this manuscript thoroughly.

Major Comments

1. As already identified by the authors as a limitation, comparing GBS with other bacteria has drawbacks. I do not think this is an appropriate comparison, because the other bacteria could cause opportunistic, iatrogenic, and underlying disease-associated infections. The comparison may be meaningful if the purpose is to distinguish GBS-associated arthritis from other septic arthritis.

I would suggest analysing the outcome of GBS cases using laboratory data as explanatory variables in order to discuss the risk of GBS.

2. There is ambiguity with respect to the bacterial nomenclature. For example, S. viridans is the general term used for several bacteria, including S. oralis and S. mitis. The authors need to clarify if Streptococcus group D is the same as Enterococcus and they also need to specify which Enterobacteriaceae were included.

In addition, the authors should state the methods used to identify these pathogens.

3. The authors should clarify the reason for not discussing gonococcal bacterial arthritis.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

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.

No

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.

I am able to assess the statistics

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

Needs some language corrections before being published

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