Reviewer's report

Title: Emergence of sporadic non-clustered cases of hospital-associated listeriosis among immunocompromised adults in southern Taiwan from 1992-2013: effect of precipitating immunosuppressive agents

Version: 2
Date: 2 February 2014

Reviewer: Sarah Taimur

Reviewer's report:

Major compulsory revision:

1: Paragraph 1 (page 3 of manuscript). While ok to start by providing a general description of the clinical manifestations of listeriosis (perinatal and non-perinatal cases), would be good to provide a separate description of reported clinical manifestations in the non-perinatal immunosuppressed host. See cited reference 2. Would be good to categorize infections in the immunosuppressed host as focal and non-focal and describe the reported manifestations in that way.

2: Paragraph 2 (page 3). Reference 8. Would add more detail of the immune response to listeria infections (innate and adaptive). Current description is too brief. Since the article is about listeriosis in the immunosuppressed host and the impact of immunosuppressive agents, essential to provide that detail.

3. Paragraph 1 (page 5). Study design section. Line 5. What are the other body fluids where listeria monocytogenes was isolated? Would specify.

4. Paragraph 1 (page 6). Line 7. In patients without CSF cultures positive for listeria monocytogenes, how was the diagnosis of CNS listeriosis made microbiologically? I.e. In these cases, was another body fluid culture like blood etc positive for listeria monocytogenes?

5. Paragraph 1 (page 8). Line 2. You mention that all cases were non-clustered. How did you define non-clustered cases for your study? In other words, how was that determination made? Would specify.

6. Paragraph 1 (page 8). You mention that all cases were adults. Did you look at pediatric cases at all? I.e. non-perinatal infections in children?

7. Paragraph 1 (page 9). Line 2. You state that L monocytogenes was isolated from blood cultures in 32 out of 35 cases. Where was it isolated from in the remaining 3 cases?

8. Paragraph 2 (page 9). Refer to figure-1. Would add detail here to provide a better description of the sites of infections. See line 2. 12 (34.3%) had bacteremia in association with other sites of infection. What were these other sites of infection? Would specify.
9. Paragraph 1 (page 10). Line 3. The fact that only 11.4% were treated with effective/appropriate antibiotic therapy is concerning. Would highlight this as a contributing factor along side the risk of immunosuppression and would try to ascertain and describe in the paper what the underlying cause is leading to a very low rate of effective antimicrobial therapy in these cases and also mention future directives that can be taken in this regard to improve the rates of effective empiric antimicrobial therapy. For example: Clinical education initiatives.

10. Paragraph 1 (page 12). Line 6. Correction in reported statistics is needed. It currently says "32 out of 35 hospital associated cases - 91.4% were immunocompromised." The numbers reported earlier in the manuscript and table-1 on HA cases are different from this. Please clarify/correct as needed.


12: Please review pages 12,13 and 14. The references should be cited in numerical sequence.

13: Table 2. Page 25. Please provide site of listeria monocytogenes isolation for HA and community associated cases.

Minor essential revision:

Please be consistent in the use of the term immunosuppressed or immunocompromised. These are used interchangeably in the current manuscript.

Level of interest: An article of importance in its field

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

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I have no financial disclosures.