Author’s response to reviews

Title: Ovarian abscess caused by Salmonella enterica serovar Typhi: a case report

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Author’s response to reviews:

Reviewer reports:

Reviewer #1: 1. Do you believe the case report is authentic?

not sure.

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.

Comments: no ethical concerns.

3. Does the Introduction explain the relevance of the case to the medical literature?

Yes
4. Does the article report the following information? Where information is missing, please specify.

a. The relevant patient information, including:
   - De-identified demographic information (age, gender, ethnicity)
   - Main symptoms of the patient
   - Medical, family and psychosocial history
   - Relevant past interventions and their outcomes

b. The relevant physical examination findings

c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at T = 0, follow up at T = 1 month.

d. Diagnostic assessments, including:
   - Diagnostic methods
   - Challenges (e.g., financial, language/cultural)
   - Reasoning and prognostic characteristics (e.g., staging), where applicable few points are missing:

1. the authors describe 'fibrous peritoneal fluid' - not sure if this a correct term. are they trying to say 'fibrinous'??

Authors response

This is noted. We have made the correction (Page 7, line 117)

2. Was the peritoneal fluid cultured? if yes, what is the result

Authors response

There was not peritoneal fluid sample sent for culture.
3. The authors mention 'right ovary was enlarged and discharging pus' - was it cystic filled with pus? was it ruptured due to fluid collection? was oophorectomy/partial oophorectomy was performed. What was the histologic findings?

Authors response

The information from the operation report doesn’t specify if it was the cyst that ruptured.

Please note in this patient no oophorectomy was done. The surgical management involved incision and pus drainage only.

4. was there any signs of acute appendicitis on histopathology?

Authors response

Histopathology revealed reactive lymphoid follicle in mucosa and acute inflammation on the serosal layer which is compatible with peri appendicitis. Below is the copy of the report for reference.

5. how the authors explain the pathogenesis of the ovarian abscess?

Authors response

This patient presented with history of abdominal pain for four weeks which got worse two days prior to her admission for intervention. Two blood cultures were negative while pus swabs taken during the operation grew S typhi. Patient came from a village which reported typhoid outbreak in the months of October to December. We assume the most probable route of infection in our patient to be hematogenous spread after a recent exposure of typhoid with sub clinical infection. Local spread from infected bowel is less likely in the absence of significant gastrointestinal symptoms and lack of small bowel inflammation in laparotomy (page 8, lines 148-153)

e. Types and mechanism of intervention

f. A summary of the clinical course of all follow-up visits

Comments:
5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?

Comments: no.

see comments above.

6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.

Yes

7. Is the Abstract representative of the case presented?

Comments: yes.

8. Does the case represent a useful contribution to the medical literature?

Comments: no. the whole pathogenesis of the ovarian abscess is very vague and it lacks many important points in discussion.

Authors response

We have revised the discussion section to better describe the pathogenesis of TOA from the literature on page 8 (Lines 142-153) and discussed the pathogenesis in our case (page 8, line 148-153). The hypothesis of hematogenous spread is based on the clinical presentations, epidemiology and laboratory findings discussed from page 5 to 7.

9. Additional comments for the author(s)?

the case report is interesting; however it lacks several important key points in regards to the pathogenesis and the clinical course.

as mentioned earlier the case reports lacks a definite cause and effect interconnection.

Authors response

The discussion section has been revised to provide clear explanation
Reviewer #2: 1.

Do you believe the case report is authentic?

Yes

2. Do you have any ethical concerns? Please consider if local Institutional Review Board approval or ethical approval was obtained (if appropriate) and if the patient (or their parent or guardian in the case of children under 18) gave written, informed consent to publish this case and any accompanying images. A statement to this effect should appear in the manuscript.

Comments: No

3. Does the Introduction explain the relevance of the case to the medical literature?

Yes

4. Does the article report the following information? Where information is missing, please specify.

a. The relevant patient information, including:
   - De-identified demographic information (age, gender, ethnicity)
   - Main symptoms of the patient
   - Medical, family and psychosocial history
   - Relevant past interventions and their outcomes

Ethnicity is not mentioned

Authors response

The ethnicity of the patient is added on page 3 (line 53)

b. The relevant physical examination findings: Yes
c. Important dates and times in this case (if appropriate, organized as a timeline via a figure or table); if specific dates could lead to patient identification, consider including time relevant to initial presentation, i.e. initial presentation at $T = 0$, follow up at $T = 1$ month.

Yes

d. Diagnostic assessments, including: Yes

- Diagnostic methods
- Challenges (e.g., financial, language/cultural)
- Reasoning and prognostic characteristics (e.g., staging), where applicable

Patient is having anaemia. If at least MCV is given or authors describe the cause (Ex- pre-existing IDA) it would be useful

Authors response

Patient’s MCV was 88fl on 28/10/2017, 90 fl on 29/10/2017 and 90 fl on 30/10/2017. The normal laboratory range is 76 to 96fl. From these results it is least likely the anaemia is due to iron deficiency.

e. Types and mechanism of intervention : Yes

f. A summary of the clinical course of all follow-up visits: Yes

Comments:

5. Is the interpretation (discussion and conclusion) well balanced and supported by the case presented?

Comments: Discussion should be organised and clear. In lines 142-144 authors mention possibility of the ovarian infection coming from local site and then haematogenous spread. In the next paragraph they describe about risk factors and outcome of salmonella infection in ovary. Next paragraph is again about possible route in the patient and gives priority to haematogenous spread without much grounds. Therefore discussion needs to be re-written.

Authors response

This is noted. The first three paragraphs of the discussion section have been revised to improve the flow of information (page 8, lines 142-164)
6. Is the anonymity of the patient protected? Please consider any identifying information in images such as facial features or nametags, whether the patient is named etc. If not, please detail below.

Yes

7. Is the Abstract representative of the case presented?

Comments: Yes

8. Does the case represent a useful contribution to the medical literature?

Comments: Yes

9. Additional comments for the author(s)?

If the photographs taken during laparotomy or ovarian sample added that would have provided extra value to the paper

Authors response

The comment is noted. We were informed that there was no photograph taken during laparotomy. It is not a routine practice in the hospital to take photos or film during surgical procedures.