May 9, 2020

BPG Editorial Office

Dear editor,

Thank you for allowing us the opportunity to revise our manuscript NO: 54849, entitled " **Presentation of gallbladder torsion at an abnormal position: a case report** ".

The reviewers and Editorial Office's comments have been carefully considered during the revision, and the manuscript has been modified accordingly. Our point-by-point responses to peer-review comment/question appear below.

Reviewer #1:

1. I cannot understand what means "ectopic acute calculous cholecystitis".

Response: What we want to express is that the gallbladder at an abnormal position has gallstones and acute inflammation.

2. Keywords: Please delete "Case report". Gallbladder torsion and gallbladder volvulus are the same thing. Please delete one of them..

Response: Thanks for reminding and we have delete the keywords "Case report" and "gallbladder volvulus".

3. Introduction: There are some ambiguous expressions (e.g.: along the axis of the cyst, on its pedicle--).

Response: Here we want to describe is that most of gallbladder rotation follows the axis of the cystic duct and cystic artery, nevertheless a few cases twisting at the junction of the gallbladder body and neck.

4. Case presentation Imaging examinations: Interpretation of imaging examinations is insufficient. Generally speaking, abdominal ultrasonography (B-mode) reveals very clearly the global image of gallbladder, and the diagnosis of gallbladder torsion is immediately and easily established. There is no description of color Doppler ultrasound. The presence or absence of portal vein abnormalities (thrombus, abnormal course, etc.) or hepatic deformity (lobar atrophy) is not mentioned. Please show ultrasound images.

Response: It is ture that abdominal ultrasonography (B-mode) reveals very clearly the global image of gallbladder, but in our case it could only find gallbladder at an abnormal position and make the diagnosis of acute calculous cholecystitis. It is difficult to diagnose the condition of gallbladder torsion through abdominal ultrasonography. Abdominal ultrasonography image have been added in the manuscript. There is no portal vein abnormalities or hepatic deformity and we described it in the revised

manuscript.

5. Discussion: Please compare the present case and previous cases meticulously and emphasize the strength of this case presentation.

Response: In our case, MRCP showed a V-shaped distortion of the extrahepatic bile ducts and a particularly extended cystic duct, which twisted and could be called "twisting signs". There are few case that showed the twisting signs clearly up to now. We also described it in the discussion part of the revised manuscript.

Reviewer #2:

1 Rather than talking about the prognosis of the disease in the conclusion of the abstract, it would be more helpful to repeat the important radiologic features.

Response: The abstract has been organized accordingly, as shown on page 2 of the manuscript.

2. Figure 4 is not significant in patient diagnosis or prognosis, so it would be better to remove it.

Response: As shown in the discussion of the manuscript, several risk factors associated with gallbladder torsion have been listed as: age >70 years, female sex, weight loss, liver atrophy, scoliosis, atherosclerosis, elongated mesentery, and loss of visceral fat. Spinal deformity of our case corresponded with the risk factor "scoliosis", it would be better to keep it.

3. The arrow description is missing in figure 5. Figure 5 and 6 is so zoomed in that I can't see the lesion well, isn't it?

Response: We apologize for the poor quality of the pictures taken during the operation. Figure 5 and 6 have been removed in our manuscript.

There are 6 figures in the revised manuscript. The original figure documents have been organized into a PowerPoint file as uploaded. We have revise throughout the reference part and provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references.

Thank you again for allowing us this opportunity to revise this manuscript. We look forward to hearing from you.

Our point-by-point responses to peer-review comments appear below.

Reviewer #1: 1. (Abstract-Background) (L.2) lderly → elderly. Response: Thanks for reminding and we have corrected accordingly. 2. (Introduction)(P.3,L.4) cyst → cystic duct. Response: Cystic duct is more appropriate here. Thanks for reminding and we have corrected accordingly. 3. (Case presentation: History of present illness) (L.2) 6d ago → of 6 day-duration (Case presentation: History of present illness). (L.3) ago → previously (Case presentation: Physical examination) (L.3) ~10 cm → Please describe accurately. Response: Thanks for reminding and we have corrected accordingly. 4. (Imaging examinations) (L.4) ectopic → abnormally positioned Response: "Ectopic" was difficult to understand here . Thanks for reminding and we have corrected accordingly. 5. (Discussion)(P.5, L.28) upper-right → right upper. Response: Thanks for reminding and we have corrected accordingly. 6. (Figure 2) US image is deformed. Please replace it. Response: Thanks for reminding and we have replaced the US image. Thank you again for allowing us this opportunity to revise this manuscript. We look forward to hearing from you.

Sincerely,

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