

## Peer Review File

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### Reviewer A

Comment 1: Situs inversus totalis (SIT) is a rare congenital anomaly. Some papers reported that laparoscopic cholecystectomy in a patient with situs inversus totalis. These studies have described that this approach is technically challenging owing to anatomical unfamiliarity in these patients.

Dissection procedure of the both side of the gallbladder you used has been discussed and does not provide any new insights.

Reply 1: Thank you for your careful peer review. The most important point of this report is to proceed with the dissection from the left side of the gallbladder as much as possible for patients with SIT. We believe that this is the key to successful LC for SIT patients and a new perspective not previously reported.

### Reviewer B

This is well written work examining the Laparoscopic cholecystectomy in a patient with situs inversus totalis: Report of a case with surgical tips. It is worth for the publishing in this form. It is a great honor to review this paper.

Comment 1: I have one suggestion whether single incision of laparoscopic surgery could be effective in this disease. The operator's standing position does not have to be changed, and there are few scratches. However, surgery can be safely performed by rotating the surgeon's right and left hand ports 90 degrees clockwise. Single incisional laparoscopic surgery is not stressful in this case.

Reply 1: Thank you for your careful peer review and compliment. Since there are a few reports that single incision laparoscopic surgery (SILS) is useful, we have added some considerations related to SILS in discussion section (line: 138-143).

### Reviewer C

Comment 1: You presented an interesting case of lap CCE in a patient with SIT. First of all, your case report is well written. While this is a rare condition I am missing "new aspects" compared to the other 100 cases that have been described in the past.

Reply 1: Thank you for your careful peer review. The most important point of this report is to proceed with the dissection from the left side of the gallbladder as much as possible for patients with SIT. We believe that this is the key to successful LC for SIT patients and a new perspective not previously reported.

Comment 2: Given that you performed both a CT and an MRI I recommend you display your imaging findings better and skip on Figure 4.

Reply 2: A contrast-enhanced CT image have been added as Figure1. I think Figure 4 is important for this paper, so I left it as Figure 5 without skipping it.

Comment 3: Was a CT-Angio done? Could you show a coronary imaging with arterial

contrast?

Reply 3: Unfortunately, CT-Angio has not been performed. Instead, coronary imaging of contrast-enhanced CT image have been added as Figure1.

Comment 4: Furthermore the Arrows you mention cannot be seen in the images.

Reply 4: I'm sorry. That was a simple mistake.

Comment 5: In order to help the surgeon in his operation planning I would like you to go over gallbladder, bile duct and liver artery anatomy in SIT Patients more thoroughly.

Reply 5: We added a description of malformation of the cystic artery based on past reports in the discussion section (line:110-118), but we failed to find any literature describing biliary malformations.

Comment 6: Additionally I would like you to elaborate why there are 8 authors for a case report.

Reply 6: TM, TO, YA, performed the surgery. TM drafted and wrote the manuscript under the supervision by NU and TY. HS, AA, and KY participated in its design and coordination.

#### **Reviewer D**

The author's aim is to report a surgical tip for laparoscopic cholecystectomy (LC) in case with situs inversus totalis (SIT). The author made a case report of a case with possible temporary bile duct stone incarceration and SIT treated with LC. The author's main claim is that it is important to ensure the creation of sufficient space posterior to the gallbladder neck through dissection performed from the side opposite to Calot's triangle during LC performed for cases with SIT. However, the manuscript is difficult to be understood at the present state. Several points listed below for the author's consideration.

Comment 1: The author concluded "Intraoperatively, it is important to ensure the creation of sufficient space posterior to the gallbladder neck through dissection performed from the side opposite to Calot's triangle for successful LC in patients with this rare congenital anomaly."

It is difficult to understand the author's intention from this sentence. Did author want to mention that it is important to begin the dissection procedure from the posterior side before anterior side? If so, author is required to make this point clear. If not, author is required to make it understandable.

Moreover, did author want to mention that this point was important in the present case, which can be applied to other cases? Or did author want to mention this point is important in general. Author is required to make this point clear. If the author's intention is "this point is important in general.", author is required to give a scientific background to this conclusion.

Reply 1: Thank you for your careful peer review. In general, we believe that tunneling of the gallbladder bed before dissection of Calot's triangle is important step to avoid

bile duct injury and vascular injury in LC. This point is the same for SIT patients. For SIT patients, the key to successful LC is to perform most of above tasks from the left side of the gallbladder by surgeons right hand. This is the point we would like to emphasize in this paper. The discussion section has been rewritten to make these points clear (line: 144-145, 154-155, 160-162).

Comment 2: Author is using a technical term “Calo’s triangle” incorrectly. If not, the manuscript is required to be reconstructed to be understood.

Reply 2: The Calot’s triangle is the area of the triangle formed by the cystic duct, common hepatic duct, and lower surface of the liver. We do not think this term is being used incorrectly.

Comment 3: Author should suggest image studies, such as CT or MRI depicting SIT.

Reply 3: A contrast-enhanced CT image have been added as Figure1.

Comment 4: Author should describe some more information of the present case, such as physical findings of abdomen, some vital signs, some other clinical examinations performed preoperatively and the outcome of the symptom postoperatively.

Reply 4: We added as much clinical information as possible.

Comment 5: Some English expressions are ungrammatical or unsuitable.

Reply 5: We asked Editage for English language proofreading.