

Dear Reviewer,

Thank you for your comments.

The manuscript has been revised.

1.your work is acceptable as all, but we need further explanation if there is a relation between the Paraduodenal hernia and cryptorchidism.

Our case did not prove a direct correlation between cryptorchidism and paraduodenal hernia. Actually, no studies exists yet that show the association between them. In our case, the patient accidentally found paraduodenal hernia when he has been diagnosed with hydronephrosis and cryptorchidism.

2.If the paraduodenal hernia and secondary hydronephrosis is accidentally discovered, mention that.

Paraduodenal hernia was accidentally found during hydronephrosis surgery. It is inferred that hydronephrosis may be caused by paraduodenal hernia, but the real cause remains to be further discovered. (line158-160). We have modified and mentioned in the article.

3.Is there any cause which prevents the repair of paraduodenal hernia with the treatment of cryptorchidism in one operation. Good luck

In this case, the preoperative examination did not reveal the presence of paraduodenal hernia, so we planned to perform laparoscopic pyeloplasty, with an operation time of about 1.5 hours. Because the stent needs to be removed again 6-8 weeks after pyeloplasty, we planned to perform testicular descent and fixation at the same time during the second stent removal operation, which takes approximately 1 h. Thus, patients do not have to undergo long-term general anesthesia multiple times, and the number of operations does not increase. (Line 151-157).

Dear Reviewer,

Thank you for your comments.

The manuscript, references, figure and Table have been revised.

1: Title: Make the title more informative: such “Successful total laparoscopic correction of hydronephrosis caused by left paraduodenal hernia in a child with right cryptorchism”. This is an example, and the authors are free to use their way of making the title more informative.

The title has been revised in accordance with your opinions.

Title: Successful total laparoscopic correction of hydronephrosis caused by left paraduodenal hernia in a child with right cryptorchism

2: Abstract: In the Background section, the authors should highlight why they are presenting this report (that total laparoscopic surgery is challenging ...etc.)

The Background section has been revised. We presenting this report for the following reasons.

The case was revealing that PDH was a possible reason for hydronephrosis. And the careful laparoscopic exploration surgery was necessary to find infrequent causes of hydronephrosis avoiding Invalid Anderson – Hynes pyeloplasty surgery and its injury (line76-79)

3: Key words: okay. The authors may add “case report” as a key word.

We have added “case report” as a key word

4: Introduction: In Line 35, “without a definite cause is confusing. There is always a cause for intestinal obstruction, and that is the herniation itself. Either the authors need to correct this segment such that it means what they want to say or omit this portion of the sentence.

We have deleted the sentence.

Case presentation:

1. Briefly discuss the CT-scan findings of internal herniation particularly, paraduodenal herniation (Line 51, 52).

The article has been revised.

Contrast-enhanced computed tomography (CT) did not accurately find paraduodenal hernia, only confirmed left hydronephrosis and left ureteropelvic junction obstruction (Fig. 1) (ling 98-101).

2. Line 52,53: “Laparoscopic exploration and Anderson–Hynes pyeloplasty were performed to relieve hydronephrosis”. This line should be omitted or re-written to make sense, because the authors claim later that the hydronephrosis did not need any surgery for correction.

Laparoscopic exploration and Anderson – Hynes pyeloplasty are often used for intraoperative diagnosis and correction of ureteropelvic junction obstruction (line 105-106).

3. Line 56, 57: “hyperexpansion of the renal pelvis and difficult malrotation of the left PDH” does not make any sense, and should be rewritten making the meaning more expressive.

Laparoscopic examination showed dilation of the left renal pelvis, and some adjacent intestines and rings surrounding the duodenal recess, forming PDH(ling 108-109).

4. Line 57,58: “defect in the left paraduodenal hernia and interior descending colon”. This part of the sentence does not make any sense and needs to be rewritten to make the meaning more expressive.

A thorough examination of the abdominal cavity under laparoscopy showed that the left renal pelvis was dilated and some adjacent intestines and rings were surrounded in the paraduodenal recess, forming PDH. PDH compresses the upper part of the left ureter, resulting in hydronephrosis (Fig. 2) (ling 109-111).

5. Line 60: What do the authors mean by “small bowel dysplasia”? Elaborate or provide the correct expression.

The small intestine is smaller in patients with paraduodenal hernia than in normal children of the same age, and the hernia is reduced by traction and division of the sac (ling 112).

6. Line 65: What does “compressed the intestinal canal” mean?

After placing the bowel in the hernia sac at the correct position, we found that the anterior wall of the hernia sac neck (the branches of the inferior mesenteric vein and

left colonic artery) blocked the blood supply of some bowel tubes (ling 115-117).

7. Line 65, 66: “After 20 min of blocking the blood flow, we confirmed that intestinal peristalsis, color, and blood supply were normal”. Please explain why the authors did such a maneuver? Why was it needed? Is it needed to obliterate vascular supply for 20 minutes to check for devascularization?

To make sure that the blood vessel (the branches of the inferior mesenteric vein and left colonic artery) was not necessary, we had been occluding it for 20 min (118-119).

8. Line 70: “a laparoscopic surgery was performed to treat cryptorchidism”. Explain the procedure done.

Three months later, the patient underwent laparoscopic testicular descent and fixation under general anesthesia to treat cryptorchidism (ling 124-125).

9. Line 71: BUN. Write the full form once before using abbreviations.

We have written the full form of BUN.

Blood urea nitrogen (BUN)

Discussion:

1. Line 75: “Currently, malrotation is a potential mechanism of PDH”. What do the authors mean by Currently?

Since PDH was first described in 1857 and classified in 1889 [3], studies have shown that poor rotation is a potential mechanism of PDH (ling 130-131)

2. Line 78, 79: Provide a reference for the sentence.

We have provided a reference. Reference 7.

Left PDH develops secondarily to midgut rotation failure [7], which can lead to small bowel obstruction or other clinical manifestations. (ling 135)

3. Line 81: What do the authors mean by “complex clinical features”. Explain and provide examples.

Left PDH develops secondarily to midgut rotation failure [7], which can lead to small bowel obstruction or other clinical manifestations. It is difficult to diagnose because of complex clinical features [8]. Laboratory tests are of little diagnostic value, and physical examination cannot lead to diagnosis unless the hernia is sufficiently large to

form an abdominal mass (ling 135-139).

4.Line 90: What do the authors mean by “repair the herniated structures”

Surgery respects the ischemic intestinal segment, returns the contents of the hernia to the normal position, and closes the hernia hole (ling 144-145).

5.Line 96-102: Can be removed and only mention that the salient features such asare shown in Table 1.

The sentences have been revised.

We extracted 23 cases from PubMed and Google Scholar databases using the keywords “hydronephrosis,” “PDH,” and “internal hernia,” and found that only two cases required conversion to laparotomy (Table 1). Overall, laparoscopic diagnosis and repair surgery were used to treat left PDH (ling176-179) .

6.Line 105, 106: This sentence does not make any sense. Omit it.

It has been Omitted.

7 Throughout the text the authors do not mention the sidedness of the hydronephrosis.

In the Discussion section, the authors need to highlight why they are reporting the case: difficulty, sudden change of plan, rarity, challenge faced before or during the surgery etc.

In this case, the preoperative examination did not reveal the presence of paraduodenal hernia, so we planned to perform laparoscopic pyeloplasty, with an operation time of about 1.5 hours. Because the stent needs to be removed again 6-8 weeks after pyeloplasty, we planned to perform testicular descent and fixation at the same time during the second stent removal operation, which takes approximately 1 h. Thus, patients do not have to undergo long-term general anesthesia multiple times, and the number of operations does not increase. However, the paraduodenal hernia was found during routine abdominal exploration during the operation. We have never seen the paraduodenal hernia during the operation of hydronephrosis. After observation and analysis during the operation, we concluded that the patient's ureteropelvic junction

obstruction was not obvious and the location of the paraduodenal hernia was close to the ureteropelvic junction, so hydronephrosis caused by the compression of the ureteropelvic junction by the paraduodenal hernia was suspected. Although this was not certain, we decided to repair the paraduodenal hernia first to avoid irreversible damage caused by blind treatment of the ureteropelvic junction. The follow-up results confirmed that our decision was correct.

Because we had no previous experience in surgical repair of paraduodenal hernia, the operation was long (about 3 hours), and the anesthesia time for the patient was longer than three hours. The position and incision of testicular descent fixation are quite different from those of paraduodenal hernia surgery. If testicular descent fixation had been performed at this time, the patient would have endured a longer period of general anesthesia and bear the risk of changes in position and incision during the operation. Considering these disadvantages, we decided to wait for the recovery of this operation before performing testicular descent fixation (line 151-175).

In our case, long-term postoperative follow-up showed that hydronephrosis was cured. This finding provides indirect evidence that hydronephrosis is caused by PDH. This case could help to avoid similar surgical risks and introduce a possible cause of hydronephrosis. It revealing that PDH was a possible reason for hydronephrosis. And the careful laparoscopic exploration surgery was necessary to find infrequent causes of hydronephrosis avoiding invalid Anderson-Hynes pyeloplasty surgery and its injury (180-185).

References:

1.Reference 3: Needs to be checked and omitted as it seems irrelevant in this report.

It has been Omitted.

2.Reference 9: Confusing. Check and replace.

The reference has been replaced.

3. Reference 13: Incomplete reference.

The reference has been revised.

Falk GA, Yurcisin BJ, Sell HS: Left paraduodenal hernia: case report and review of the literature. BMJ Case Rep 2010, 11: 1-5.

1. Table 1: Mention the full form of all abbreviations in the legend.

They have been revised.

2. Figures:

Figure 1A: A better picture of CT-scan is needed which shows the left paraduodenal hernia

Figure 1B and 1D are not needed. Please remove these.

The Figure 1 has been revised.