Peer Review File

Article Information: https://dx.doi.org/10.21037/tau-23-287

<mark>Reviewer A</mark>

Comment 1: This is a retrospective observational study of an uncommon, but fairly widelyreported condition. The sample size is respectable, but without median follow-up time (the authors have presented means), it is difficult to say if this indeed represents the longest follow-up available in the literature.

Reply 1: Many thanks for this constructive suggestion. From December 2009 to May 2022, we collected data on 59 patients who were diagnosed with non-parasitic chyluria preoperatively, and the median follow-up time was 78 months (3-152months). We have added the median follow-up period data to the revised manuscript.

Change in the text: We have modified our text as advised (see Page 3, line 53).

Comment 2: Significant revision to grammar, vocabulary, and sentence structure are required. English proof-reading is recommended if English is not the author's primary language.

Reply 2: Following your suggestion, the language editing had been completed on the Editage Editing Service (JOB CODE: XIIAW_2), the editorial certificate is uploaded.

Change in the text: No changes.

<mark>Reviewer B</mark>

Comment 1: There are a number of compositional, grammatical, and syntactical errors throughout. The manuscript requires full proof reading.

Reply 1: Following your suggestion, the language editing had been completed on the Editage Editing Service (JOB CODE: XIIAW_2), the editorial certificate is uploaded.

Change in the text: No changes.

Comment 2: In the abstract, it is reported that "patients gave up surgery." I would use the were "declined."

Reply2: Thanks a lot for your helpful comment, we have changed the word "gave up" to "declined" in the abstract.

Change in the text: We have modified our text as advised (see Page2, line 38).

Comment 3: Throughout the manuscript the authors mention lesions in respect to right and left. Perhaps "laterality" of the chyluria would be more appropriate

Reply3: Many thanks for this constructive suggestion. We had revised our manuscript according to the reviewer's comments.

Change in the text: We have modified our text as advised (see Page2, line 41; Page5, line 124).

Comment 4: Information about how the laterality of the chyluria was diagnosed would be informative

Reply4: Thanks a lot for your helpful comment. We are very sorry that we did not fully explain the diagnose process of the chyluria. In our manuscript, all patients underwent preoperative cystoscope, urine examination for chyle, and computed tomography (CT) to evaluate the laterality of the chyluria. Cystoscopy revealed that milky urine spurting from the ureteral orifice of the diseased side, and urine chyle test results were positive in all patients. Moreover, CT examination ruled out other diseases of the urinary system. And in the revised manuscript we also add this content in the "patients" part.

Change in the text: We have modified our text as advised (see Page5-6, line 125-127).

Comment 5: Please provide a citation for the statement discussing the reduction in parasitic chyluria due to continuous economic development

Reply5: Thank you for reminding, we have added related citations to statements about the reduction in parasitic chyluria owing to continuous economic development.

Change in the text: We have modified our text as advised (see Page4, line 92).

Comment 6: In the introduction they refer to "retroperitoneal endoscopic renal pedicle lymphatic disconnection." I think "retroperitoneal laparoscopic" would be more accurate

Reply6: Thanks a lot for your helpful comment, we have changed the word "retroperitoneal endoscopic" to "retroperitoneal laparoscopic" in the revised manuscript.

Change in the text: We have modified our text as advised (see Page4, line 92).

Comment 7: In the methods there is reference to a "greater dorsal side". Can the authors describe this further?

Reply7: Many thanks for this constructive suggestion, and we are sorry for the inappropriate expression which led to confusion. We are sorry for the misusing of "greater" in the operative technique part, and have modified the relevant sentence, with no expression of "greater". We are very sorry for our inappropriate writing.

Change in the text: We have modified our text as advised (see Page7, line 151-152).

Comment 8: How were the vessels ligated, with clips or surgical ties?

Reply8: Thank you, the lymphatic vessels ligated with clips and ultrasonic knife cutting and electrocoagulation in our operation, and in the revised manuscript we also add this content in the "Operative technique" part.

Change in the text: We have modified our text as advised (see Page7, line 156, line 158).

Comment 9: A figure or cartoon of the ligation procedure would be helpful

Reply9: Many thanks for this constructive suggestion, We agree with the reviewer that it is a good idea to make a figure of the ligation procedure. And we made a picture of the ligature process and uploaded it.

Change in the text: We have modified our text as advised (see Page7, line 163-164, supplementary Figure 1).

Comment 10: What is meant by "perirenal pelvis"

Reply10: Many thanks for this constructive suggestion, and we are sorry for the inappropriate expression which led to confusion. The meaning of the word "perirenal pelvis" is "around the renal pelvis". Consequently, we have changed the term "perirenal pelvis" to "around the renal pelvis" in our revised manuscript, thank you.

Change in the text: We have modified our text as advised (see Page7, line 155-156).

Comment 11: Was urine examined microscopically for the presence of chyle. Were chylomicrons checked for in either urine or blood?

Reply11: Thanks a lot for your helpful comment. We describe in the manuscript that all patients underwent a urine chyle test, and urine chyle test results were positive in all patients.

Change in the text: No changes.

Comment 12: Are blood lipid levels available?

Reply12: Thanks a lot for your valuable advice. According to your advice, we carefully checked the medical records of each patient. Since blood lipid detection is not a routine preoperative examination item, we found that the medical records of some patients did not record blood lipid in detail, and obvious bias may exist as consequence, which could not objectively reflect the real situation. Finally, we are regretful for the lack of results in this part, and in the revised manuscript we also discussed about this limitation in the discussion.

Change in the text: We have modified our text as advised (see Page13, line 286-289).

Comment 13: in the results there is mention of a "double-J tube" being placed to help with intraoperative ureteral injury. Please use the term "ureteral stent"

Reply13: Thanks a lot for your helpful comment, we have changed the word "double-J tube" to "ureteral stent" in the manucript.

Change in the text: We have modified our text as advised (see Page9, line 212).

Comment 14: In the discussion there was a comment that there is a fistula between the "lymphatic vessels and the urethra." Is this correct?

Reply14:Thank you for reminding, and we are sorry for the inappropriate expression which led to confusion. We have modified the relevant sentence and marked red in our revised manuscript. We are very sorry for our inappropriate writing.

Change in the text: We have modified our text as advised (see Page10, line 225-226).

Comment 15: Can you please provide a citation for the risk of HIFU thermal injury

Reply15: HIFU transmits focused ultrasound energy into the diseased tissue (therapeutic target) to induce an instantaneous rise of temperature over 60 °C, leading to protein denaturation and histiocyte coagulative necrosis to achieve the ablation of targeted tissues. Previous research results showed that HIFU-irradiated tissues display thermal injury to adjacent tissues or organs. For example, JKY Ko et.al. reported that thermal bowel injury after ultrasound-guided HIFU treatment of uterine adenomyosis (PMID: 29154472). Chin-Ru Ker et.al. reported a case who suffered from acute renal insufficiency and thrombocytopenia immediately after receiving HIFU for uterine myomas (PMID: 32653136). Moreover, some patients had thermal injury of the sacrum after receiving HIFU for uterine fibroids (PMID: 30855440). Hence, we mentioned in our manuscript that HIFU thermal injure might damage the ureter, renal vessels and other adjacent organs.

Change in the text: We have modified our text as advised (see Page11, line 235).

Comment 16: In the discussion there is mention of "no statistical significance among the 3 groups." I think the authors intend to say "change in renal function over time "

Reply16: Thank you. we are sorry for the inappropriate expression which led to confusion. We have modified the relevant sentence and marked red in our revised manuscript.

Change in the text: We have modified our text as advised (see Page12, line 259).

Comment 17: Is there any way to speculate on the etiology for the chyluria for each of the patients. Obviously the patients with history of thoracic or abdominal surgery have a more likely cause for their chyluria

Reply17: Thanks a lot for your helpful comment. In our manuscript, 9 patients had a history of thoracic or abdominal surgery, and this group of patients was more likely to cause chyluria.

However, the cause of non-parasitic chyluria in other patients was not available. The etiology of these patients may be due to lymphatic malformations, stenoses of the thoracic duct, lymphangioma of kidney or others idiopathic cause. We are regretful for the lack of the accurate etiological description in our manuscript and we also discussed about this limitation in the discussion.

Change in the text: We have modified our text as advised (see Page13, line 285-286).