

Name of journal: World Journal of Gastrointestinal Oncology

Manuscript NO: 73951

Title: Successful treatment of pancreatic accessory splenic hamartoma by laparoscopic spleen-preserving distal pancreatectomy

Dear editors and reviewers:

Thanks for your contributions and your careful consideration for our manuscript. We also thanks for your each suggestion for this paper. According to the comments from the reviewers and editors, we have made responses and revisions.

Reviewers' comments

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: Hamartoma in the pancreatic accessory splenic is rare tumor and has not been reported, so this case report is a worthwhile report. But, there are a few details that I would like you to add. 1.Please insert a macro image of the resection specimen. 2.One of the key points in this report is that the resection was done laparoscopically, so please insert intraoperative figures and describe the more detailed surgical procedure. 3.Is it possible for CA19-9 to be elevated in a spleen hamartoma? If you have any thoughts on the normalization after resection (e.g., CA19-9 immunostaining of tissue), please describe.

Response to Reviewer #1

Thank you for your suggestions. According to your suggestions, we have answered as follows and revised our manuscript.

1. I am sorry, we did not save the macro image of the resection specimen. But, we have the microscopic image of the resection specimen (Figure 4A in manuscript, HE ×40), in which the mass (red arrow) growing from the pancreas (green arrow)

can be clearly seen. Thanks for your kindly suggestion again, we will take and save macro image of the resection specimen of some interesting cases during surgery in the further work.

2. I am sorry, we did not save the intraoperative figure. But, I can describe the detailed surgical procedure. (Line19-29/Page7, Line1-6/Page8 of revised manuscript) The patient was placed in a 45° head high position. Following anesthesia and sterilization of the surgery field, sterile drapes were whisked onto the patient's body. Subsequently, a 10 mm long incision was made in the superior border of the umbilicus. A CO₂ pneumoperitoneum was set up with 15 mmHg intra-abdominal pressure using a Veress needle, and a 10 mm trocar puncture was made to insert a laparoscopic lens. Under direct vision, 10 mm and 5 mm incisions were made in the left and right abdomen, respectively, and corresponding trocars were implanted in each incision. Then, we inserted surgical instruments to operate the surgery. We exposed the pancreas with an ultrasonic scalpel. Two red pancreatic masses were found, close to each other and growing from the pancreatic tail. The upper and lower margins of the middle pancreas were isolated. We dissociated the superior mesenteric artery and portal vein from the lower margin of the pancreas and opened the posterior pancreatic passage along the portal vein sulcus. The body and tail of the pancreas were isolated toward the splenic hilum. We dissected the distal pancreas, including the masses, with a cutting closure device. The masses were close to both the splenic artery and vein. We carefully isolated the masses from the blood vessels. Finally, the distal pancreas and tumor were removed entirely, and the spleen was preserved by laparoscopic surgery.

Thanks for your kindly suggestion, we will take and save intraoperative photos of some interesting cases during surgery in the further work.

3. (Line3-17/Page10 of revised manuscript) Abnormally elevated CA19-9 often occurs in patients with malignancies or inflammation of the pancreatic, biliary and gynecological systems^[21]. Spleen hamartoma is a rare benign “tumor”, and fewer

than 200 cases have been reported thus far. To date, only one study has reported the elevation of serum CA19-9 in a case of spleen hamartoma^[22]. However, normalization was not reported after resection. In our case, the patient was symptomatic with left upper quadrant abdominal pain. In addition, laboratory examination revealed that CA19-9 was abnormally elevated (96.7 U/ml). A malignant tumor cannot be ruled out. Therefore, we successfully performed laparoscopic spleen-preserving distal pancreatectomy for the patient. The final diagnosis was pancreatic accessory splenic hamartoma with cystic degeneration. After resection, the serum CA19-9 level was reduced to normal, and CA19-9 immunostaining of the tissue was negative. As the case is extremely rare, the mechanism behind the occasional elevation of serum CA19-9 in the case of spleen hamartoma has not been studied thus far. In our case, the elevation of serum CA19-9 might be caused by the inflammation of the cystic degeneration of pancreatic accessory spleen hamartoma.

21 Carleton C, Hoang L, Sah S, Kiyokawa T, Karamurzin YS, Talia KL, Park KJ, McCluggage WG. A Detailed Immunohistochemical Analysis of a Large Series of Cervical and Vaginal Gastric-type Adenocarcinomas. *Am J Surg Pathol* 2016; 40: 636-644 [PMID: 26685087 DOI: 10.1097/PAS.0000000000000578]

22 Fujii T, Obara T, Shudo R, Tanno S, Maguchi H, Saitoh Y, Ura H, Kohgo Y. Splenic hamartoma associated with thrombocytopenia. *J Gastroenterol* 1997; 32: 114-118 [PMID: 9058306 DOI: 10.1007/BF01213307]

Reviewer #2:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: An interesting and novel case where the authors report

the first case of a hamartoma localized in pancreatic accessory spleen successfully treated with spleen-preserving distal pancreatectomy. This information may also prove clinically useful if clinicians meet a similar case in the future. The case description is well organized and the authors provide adequate high-quality images to illustrate the case. Nevertheless the following points should be improved: - the English should be revised as there are grammar and orthography errors along the text that require language polishing - It is not very perceptible how the pathology diagnosis (illustrated in Figure 4) was reached before surgery, as implied from the sequence described in the "Case presentation" section. Was it biopsy? Ultrasound- or CT-guided? Please specify.

Response to Reviewer #2

Thank you for your suggestions. According to your suggestions, we have answered as follows and revised our manuscript.

1. We have performed language polishing for the revised manuscript by company your recommend.
2. The pathology diagnosis was not reached before surgery. Biopsy was not performed before surgery. The results of Figure 4 were obtained by the microscopic examination of surgical specimen (Line5-12/Page7 of revised manuscript).

EDITORIAL OFFICE'S COMMENTS"

(1) Science editor:

The authors report a case of a hamartoma affecting the pancreatic accessory spleen. This is the first case report of such a case so it is novel. A thorough revision of the grammar is needed as suggested by the reviewers. There also needs to be clarification of whether biopsies were taken at the time of surgery or prior? A photo of the removed specimen would be valuable. The discussion should include information on CA19-9 values for pancreatic hamartomas and an explanation of why these were elevated in this case.

Language Quality: Grade C (A great deal of language polishing)

Scientific Quality: Grade C (Good)

Response to Science editor

Thank you for your suggestions. According to your suggestions, we have answered as follows and revised our manuscript.

1. As suggested by you and the reviewers, we have conducted a thorough revision of the grammar in the revised manuscript (Line24-29/Page8, Line1-29/Page9 of revised manuscript).
2. Biopsy was not performed before surgery. I am sorry, we did not save a photo of the removed specimen. But, we have the microscopic image of the resection specimen (Figure 4A in manuscript, HE $\times 40$), in which the mass (red arrow) growing from the pancreas (green arrow) can be clearly seen. Thanks for your kindly suggestion, we will take and save photos for removed specimen of some interesting cases during surgery in the further work.
3. We have discussed the information on CA19-9 values for spleen hamartoma. (Line3-17/Page10 of revised manuscript) Abnormally elevated CA19-9 often occurs in patients with malignancies or inflammation of the pancreatic, biliary and gynecological systems^[21]. Spleen hamartoma is a rare benign “tumor”, and fewer than 200 cases have been reported thus far. To date, only one study has reported the elevation of serum CA19-9 in a case of spleen hamartoma^[22]. However, normalization was not reported after resection. In our case, the patient was symptomatic with left upper quadrant abdominal pain. In addition, laboratory examination revealed that CA19-9 was abnormally elevated (96.7 U/ml). A malignant tumor cannot be ruled out. Therefore, we successfully performed laparoscopic spleen-preserving distal pancreatectomy for the patient. The final diagnosis was pancreatic accessory splenic hamartoma with cystic degeneration. After resection, the serum CA19-9 level was reduced to normal, and CA19-9 immunostaining of the tissue was negative. As the case is extremely rare, the mechanism behind the occasional elevation of serum CA19-9 in the case of spleen hamartoma has not been studied thus far. In our case, the

elevation of serum CA19-9 might be caused by the inflammation of the cystic degeneration of pancreatic accessory spleen hamartoma.

21 Carleton C, Hoang L, Sah S, Kiyokawa T, Karamurzin YS, Talia KL, Park KJ, McCluggage WG. A Detailed Immunohistochemical Analysis of a Large Series of Cervical and Vaginal Gastric-type Adenocarcinomas. *Am J Surg Pathol* 2016; 40: 636-644 [PMID: 26685087 DOI: 10.1097/PAS.0000000000000578]

22 Fujii T, Obara T, Shudo R, Tanno S, Maguchi H, Saitoh Y, Ura H, Kohgo Y. Splenic hamartoma associated with thrombocytopenia. *J Gastroenterol* 1997; 32: 114-118 [PMID: 9058306 DOI: 10.1007/BF01213307]

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastrointestinal Oncology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1 Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

Response to company editor-in-chief

Thank you for your contributions and suggestions. We have provided decomposable Figures (in which all components are movable and editable), and organize them into a single PowerPoint file. Thanks again.

Yours

sincerely,

Dr. Sheng Yan

Sheng Yan, PhD, Chief Doctor, Division of Hepatobiliary and Pancreatic Surgery,
Department of Surgery, Second Affiliated Hospital, School of Medicine, Zhejiang
University, 88# Jiefang road, Zhejiang Province, Hangzhou 310000, China. E-mail:
shengyan@zju.edu.cn.

March 26, 2022