

Answering Reviewers

Title: **Sarcomatoid carcinoma of the pancreas: A case report and brief discussion of the terminology**

Journal: *World Journal of Clinical Cases*

Thank you for your letter and for the reviewers' comments concerning our manuscript entitled "Sarcomatoid carcinoma of the pancreas: A case report and brief discussion of the terminology".

Those comments are all valuable and very helpful for revising and improving our paper. We have studied comments carefully and have made correction which we hope meet with approval.

Revised portion are highlighted in the paper. The main corrections in the paper and the responds to the reviewer's comments are as flowing:

Responds to the reviewer's comments:

Reviewer #1:

1. In the introduction or discussion please include incidence of pancreatic sarcomatoid carcinoma and carcinosarcoma; the rarity of this tumor is the only justification for additional case reports.

Response: According to the comment, we added the following new sentences in the discussion.

Revised; p 9 line 11-15

Sarcomatoid carcinomas and carcinosarcomas are rare aggressive malignancies that can develop at various sites of the body, including genitourinary tract, respiratory tract, digestive tract, breast and thyroid glands, among others^[1, 4]. So far, 23 cases of sarcomatoid carcinomas or carcinosarcomas arising in the pancreas have been reported^[5].

2. In the case report please add normal ranges for laboratory tests.

Response: Thank you for your advice, we added the normal ranges in the sentence, which can help to evaluate whether the results were within normal limits.

Revised; p 7 line 27-29 & p 8 line 1

Laboratory tests yielded the following results: total bilirubin 44 μ mol/L (reference <21 μ mol/L), direct bilirubin 31 μ mol/L (reference <5 μ mol/L), alanine aminotransferase 97 U/L (reference <40 U/L), and carbohydrate antigen 19-9 14.6 U/L (reference <37 U/L).

3. Clarify meaning of “sheet lesion” in radiologic description

Response: The sheet lesion in the main pancreatic duct proved to be the tumor lesion. And we added the following new sentence in the discussion.

Revised; p 8 line 19-20

The gross pathology revealed a mass (2.5×2.5×2.0 cm) located mainly in the pancreatic head with extension into the main pancreatic duct.

4. After the statement: Died six months after surgery – please clarify if he died of recurrent disease/post-operative complications or unrelated cause.

Response: According to the comment, we added the following new sentence.

Revised; p 9 line 7-8

The patient was discharged from the hospital on the eleventh postoperative day and died of liver metastasis and peritoneal metastasis 6 months later.

5. In the paragraph: “A growing body of evidence suggests that most pancreatic carcinosarcomas are monoclonal tumors arising from differentiation of a single stem cell or a more complete EMT, compared with sarcomatoid carcinomas”; Please do not add to the confusion in this area, and modify the text to something like:” while there is substantial evidence that both carcinosarcomas and sarcomatoid carcinomas have epithelial origin, carcinosarcomas show a more complete EMT of the sarcomatoid component compared to SPC.

Response: We have replaced the sentence according to the suggestion.

6. The text describes: Contrast-enhanced CT revealed a low-density round mass measuring about 1.5 cm × 1.1 cm in the pancreatic head. Further down in the text: Pathological examination revealed “ please describe correlation of pathologic findings with radiologic findings; was the radiologic estimation of tumor size right? or did it over/underestimate the tumor size. Please include final

TNM pathologic stage. If the patient died of tumor recurrence, what was the expected survival of his specific TNM stage?

Response: Thank you for the comment, we added the following new sentences.

Revised; p 8 line 19-20

The gross pathology revealed a mass (2.5×2.5×2.0 cm) located mainly in the pancreatic head with extension into the main pancreatic duct.

Revised; p 9 line 2-4

Accordingly, the pathologic diagnosis of the pancreatic neoplasm was SCP with TNM stage IIB (T2N1M0).

Revised; p11 line 17-20

Irrespective of the treatment provided, patients have an extremely poor prognosis, with an average survival after diagnosis of 5 months^[3]. According to a report by Shi, the median OS for T2N1M0 pancreatic ductal adenocarcinoma was 19 months^[16]. In our case, by contrast, the patient survived 6 months after surgery.

7. Please expand on the diagnostic categories included under the WHO classification of undifferentiated carcinomas of the pancreas that it encompasses: anaplastic giant cell, sarcomatoid and carcinosarcoma, and that the latter 2 are much less common than the former (anaplastic).

Response: According to the comment, we added the following new sentences.

Revised; p9 line 17-28

For example, according to the WHO histological classification, carcinosarcoma is a hyponym of sarcomatoid carcinoma in lung tumors^[6], while they, together with anaplastic giant cell carcinoma, are grouped as undifferentiated (anaplastic) carcinomas of the pancreas^[3]. Anaplastic giant cell carcinoma is a relatively common type composed of pleomorphic mononuclear cells and bizarre-appearing giant cells^[3], and the latter can be further divided into pleomorphic giant cells and osteoclast-like giant cells^[7]. The definitions of pancreatic sarcomatoid carcinoma and carcinosarcoma vary among authors. Based on the histological, ultrastructural, and immunohistochemical evidence, it is undisputable that both sarcomatoid carcinoma and carcinosarcoma of the pancreas have epithelial and

mesenchymal features.