Peer Review File

Article information: http://dx.doi.org/10.21037/tcr-21-2627

Major points:

Comment 1: The major problematic point of this article is the diagnostic criteria of choriocarcinoma. The authors should rule out a possible diagnosis of hCG-positive anaplastic/undifferentiated carcinoma. The presence of two cell pattern composed of syncytiotrophoblasts and cytotrophoblasts would be key histology of this differentiation. However, such histopathological description is not included in this manuscript. The authors described "immunohistochemical staining results are generally necessary to make a precise diagnosis". However, this concept would be inappropriate.

Reply 1: First, we revised the diagnostic criteria of choriocarcinoma and supplemented the differential diagnosis points for diseases with which it may confound. Also, corrected inaccurate representation: immunohistochemical staining results have a significant role in making accurate diagnosis.

Changes in the text: Line 98-109

Comment 2: This manuscript is seemed to be lengthy. The clinicopathological features of this case should be described scientifically. For example, the time of removed chest tube is not needed. The number of lymph nodes "5th, 6th, ..groups" are defined by what ? (page 2, line 8). "Combined morphology and enzyme labeling" means what? Whether there were other components which may show choriocarcinomatous differentiation or not, or a possibility of metastatic tumor should be discussed. The reviewed features are not summarized in "Discussion". The significance of genetic findings of this case is not clearly discussed in "Discussion". Such genetic features have been observed in previous cases of primary pulmonary choriocarcinoma or gestational choriocarcinoma?

Reply 2: Unnecessary clinical information has been removed, such as chest tube removal time. For "5.6.7.10.11 group of lymph nodes", we have given a more precise definition. Combined morphology and enzyme labeling should be described more specifically as follows: according to pathological microscopic findings and immunohistochemical staining results. The possibility of metastases was ruled out by performing PET-CT on the patient. After genetic testing of this patient, we found that this patient has changes in the TP53, NRAS and FGFR1 gene local, because this is the first reported case of male primary choriocarcinoma with genetic testing. Therefore, its specific mechanism still needs to be further explored.

Changes in the text: Line 23, Line 53

Minor points:

Comment 1: The patient profile should be included in "Case presentation" not in "Introduction". Reply 1: The patient profile in Introduction has been moved to Case presentation. Changes in the text: Line 36

Comment 2: What kind of the initial pulmonary shadows? (page 1, line 39) Reply 2: There is a solid nodules shadows in the lungs when first time found. Changes in the text: Line 40

Comment 3: Excess use of "no": no obvious enhancement after enhancement, no thickening of the pleura, no swelling of lymph nodes, no pleural.... (page 1, lines 42-44). Reply 3:The description has been reworked. Changes in the text: Line 45

Comment 4: Abrupt abbreviations: "HCG" (page 1, line 32); "PET" (page 2, line 46); "CATA-3" (?) (page 2, line 55); "SMARCA4" (page 2, line 55); "CK" (page 2, line 55); "TTF-1" (page 2, line 56); "VIM" (page 2, line 56). Reply 4: Abbreviations are added at the end of the text. Changes in the text: Line 178-193

Comment 5: No spaces after commas or periods:

HCG(+),CATA-3,SMARCA4(+),CK7(+),CK7part (page 2, line 55); NUT(-),TTF-1(-),VIM(-).Combined ..." (page 2, line 56) Reply 5: We have added space after commas or periods. Changes in the text: Line 56

Comment 6: What is CK(+),part of P40(+)? (page 2, line 55) Reply 6: Indicates that CK immunohistochemical staining results were positive, and portion of P40 immunohistochemical staining results were positive. Changes in the text: Line 57

Comment 7: "Most of the neoplasms" would be "originated from gonads" Reply 7: The expression is inaccurate and has been reworked Changes in the text: Line 70

Comment 8: The abbreviation "PPC" is re-explained in line 70, page 2. No spaces before parenthesis. Reply 8:Modifications have been made here Changes in the text: line 74

Comment 9: "This manuscript should be edited by native English scientists. Reply 9:Article has been re-edited by native English scientists. Changes in the text: Modifications are marked in the text