**Supplementary Table 1**. Immunohistochemical findings of this case with reference of positive rate of each marker in peritoneal malignant mesothelioma (PMM) and peritoneal serous carcinoma (PSC).

|  |  |  |  |
| --- | --- | --- | --- |
| Marker (Ref.) | This case | PMM (%) | PSC (%) |
| MOC31 (1) | Positive | 5 | 98 |
| Ber-EP4 (1) | Positive | 9-13 | 83-100 |
| Claudin 4 (1) | Positive, weak | 0 | 98 |
| Calretinin (1) | Positive | 85-100 | 0-38 |
| D2-40 (1) | Positive | 93-96 | 13-65 |
| WT-1 (1) | Positive | 43-93 | 89-93 |
| CEA (1) | Positive | 0 | 0-45 |
| CA19-9 (2) | Positive | 0 | 58 |
| PAX8 (1, 3) | Negative | 0-12 | 93 |
| ER (1) | Positive, weak | 0–8 | 60-93 |
| BAP1 loss (4) | Lost | 67 | 2.5 |

Reference

1. Husain, A. N., T. V. Colby, N. G. Ordonez, T. C. et al. (2018). "Guidelines for Pathologic Diagnosis of Malignant Mesothelioma 2017 Update of the Consensus Statement From the International Mesothelioma Interest Group." Arch Pathol Lab Med **142**(1): 89-108.
2. Ordonez, N. G. (2006). "The diagnostic utility of immunohistochemistry and electron microscopy in distinguishing between peritoneal mesotheliomas and serous carcinomas: a comparative study." Mod Pathol **19**(1): 34-48.
3. Xing, D., N. Banet, R. Sharma et al. (2018). "Aberrant Pax-8 expression in well-differentiated papillary mesothelioma and malignant mesothelioma of the peritoneum: a clinicopathologic study." Hum Pathol **72**: 160-166.
4. Andrici, J., J. Jung, A. Sheen, et al. (2016). "Loss of BAP1 expression is very rare in peritoneal and gynecologic serous adenocarcinomas and can be useful in the differential diagnosis with abdominal mesothelioma." Hum Pathol **51**: 9-15.

**Supplementary Table 2.** Primary antibodies used for immunohistochemistry in this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Marker | Clone | Source | Dilution | Antigen retrieval |
| PAX8 | PAX8R1 | Abcam, Cambridge, MA, USA | 1:50 | Tris-EDTA (pH 9) |
| HNF4alfa | H1415 | Perseus Proteomics, Tokyo, Japan | 1:100 | Citrate buffer (pH 6) |
| ER | SP1 | VentanaMedical Systems, Tucson, AZ, USA | Prediluted | Tris-EDTA (pH 9) |
| CDX2 | DAK-CDX2 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| BAP1 | C4 | Santa Cruz Biotechnology, Dallas, TX, USA | 1:100 | Tris-EDTA (pH 9) |
| HER2 | Hercep test | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| Claudin 4 | 3E2C1 | Zymed, South San Francisco, CA, USA | 1:500 | Tris-EDTA (pH 9) |
| PMS2 | EP51 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| MLH1 | ES05 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| MSH6 | EP49 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| WT-1 | 6F-H2 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| D2-40 | D2-40 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| P53 | DO7 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| Pancytokeratin | AE1/AE3 | Dako, Glostrup, Denmark | Prediluted | Tris-EDTA (pH 9) |
| Calretinin | Polyclonal (rabbit) | Zymed, South San Francisco, CA, USA | 1:20 | Citrate buffer (pH 6) |