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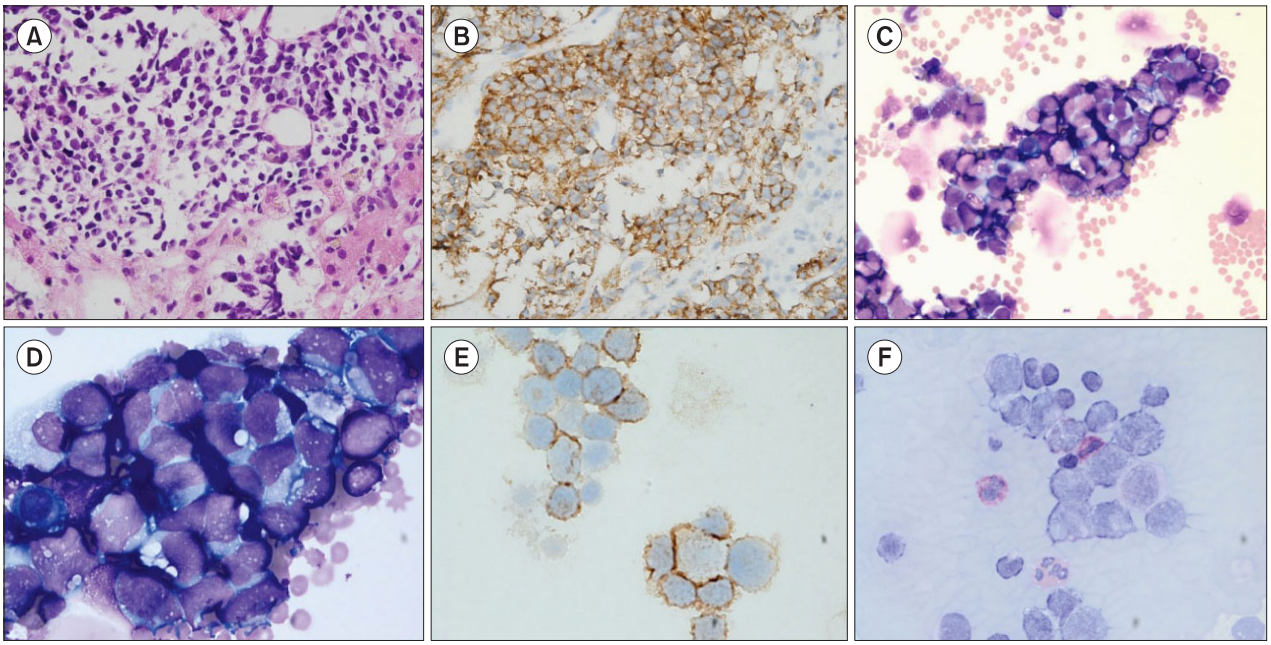
Peritoneal metastasis of a neuroendocrine tumor of the gallbladder

Sang Hyuk Park, Hyun-Sook Chi

Department of Laboratory Medicine, University of Ulsan College of Medicine and Asan Medical Center, Seoul, Korea



Neuroendocrine tumor (NET) of the gallbladder (GB) (GB-NET) is a very rare condition, representing 0.5% of all NET cases. Here, we report a case of GB-NET with peritoneal metastasis. A 55-year-old man was admitted to our institution for workup for an abdominal distension, which developed 5 weeks ago. Computed tomography (CT) of his abdomen showed ascites and an 18-cm heterogeneous enhancing mass surrounding the GB and invading the liver. Needle biopsy of the GB revealed poorly differentiated sheets of neoplastic cells with hyperchromatic nuclei and indistinct cytoplasm (**A**, hematoxylin-eosin, ×400). Neoplastic cells were positive for synaptophysin on immunohistochemical staining (**B**, ×400), but negative for cytokeratin and leukocyte common antigen, indicating neuroendocrine carcinoma, small cell type. Ascitic fluid was centrifuged, and numerous clusters of small to medium-sized neoplastic cells with back-to-back appearance were observed at a frequency of 74% (**C**, Wright stain, ×400; **D**, Wright stain, ×1,000). Neoplastic cells were positive for CD56 on immunohistochemical staining (**E**, ×1,000) but negative for periodic acid-Schiff on cytochemical staining (**F**, ×1,000). On the basis of these results, the patient was diagnosed as having GB-NET with peritoneal metastasis.