
Undifferentiated Carcinoma with Osteoclast-like Giant Cells of the Pancreas: A Case Report

Department of Surgery, Chonnam National University Medical School, Gwangju, Korea

Young Hoe Hur, Ho Hyun Kim, Eun Kyu Park, Jin Shick Seoung,
Yang Seok Koh, Jung Chul Kim, Chol Kyocho, Hyun Jong Kim

Introduction: Pancreatic undifferentiated carcinoma with osteoclast-like giant cells is a rare neoplasm comprising <1% of all exocrine pancreatic tumors. Until now, less than 50 cases have been reported in the literature. The neoplasm is composed of two distinct cell populations: a mononuclear cell population and in addition, osteoclastic tumor giant cells of uncertain lineage, and it frequently shows an inhomogeneous appearance with cystic structure. But the pathogenesis of these tumors is still controversial. Here we report a case of undifferentiated carcinoma with osteoclast-like cells of the pancreas, performed the histopathological, immunohistochemical studies.

Case Presentation: An 77-year-old woman presented with abdominal pain, anorexia during the past month. Clinical examination revealed tenderness in the right upper abdominal quadrant and rebound tenderness in the lower abdomen. Blood test showed elevated transaminases and lipase. The level of carbohydrate antigen 125 (CA 125) is elevated (279.5 U/ml). Abdominal computed tomography and magnetic resonance imaging revealed the presence of a large (about 10×5 cm) mass, arising from the tail of pancreas and invasion into spleen and adjacent bowel loop. A distal pancreatectomy with splenectomy was performed. And pancreatic mass invaded adjacent colon and posterior wall of stomach. Therefore left hemicolectomy and partial resection of stomach were performed together. The resected tumor was a 14×7.7-cm hemorrhagic and cystic mass in the pancreas tail. Histopathology and immunohistochemistry offered the diagnosis of an undifferentiated carcinoma with osteoclast-like giant cells of the pancreas. The patient was discharged on the 11th postoperative day with uneventful recovery.

Conclusion: Undifferentiated carcinoma with osteoclast-like giant cells of the pancreas is a infrequent neoplasm, and its clinical characteristics and histogenesis of osteoclast-like giant cells of the pancreas are still now variable and controversial in the literature. Therefore, further studies based on a large populations are necessary to clarify its histogenesis.