

Diagnosis of pancreatic plasmacytoma by endoscopic ultrasound-guided fine-needle aspiration

A 42-year-old male was diagnosed with a solitary plasmacytoma in the right shoulder in 2002, which was treated with local radiotherapy. In December 2004, new plasmacytomas in the knee and ankle were diagnosed and treated with radiotherapy and chemotherapy, with good

clinical response. In November 2007, a new plasmacytoma in the right thigh was diagnosed and systemic treatment was chosen.

The patient developed cholestatic jaundice after completing the second chemotherapy cycle of this protocol. A computed

tomography (CT) scan of the abdomen showed a large expansive lesion in the head of the pancreas (● Fig. 1).

Transduodenal endoscopic ultrasound (EUS) revealed a large, approximately 4-cm diameter, well-demarcated mass in the pancreatic head (● Fig. 2).

EUS-guided fine-needle aspiration (FNA) cytology revealed a small cell neoplasm with immunohistochemical profile compatible with plasmacytoma producing lambda light chains (● Fig. 3).

An endoscopic retrograde cholangiopancreatography was performed with biliary stent placement to relieve the jaundice. Four cycles of chemotherapy were performed, with partial response. However, the patient died of infectious complications after the fourth cycle.

Plasmacytoma usually affects bony tissue, but in 5% of cases there is extramedullary involvement of other organs [1]. Extramedullary plasmacytomas are malignant tumors of monoclonal plasma cells. Progression to multiple myeloma is seen in approximately 11%–30% of cases within 10 years. Gastrointestinal tract involvement is uncommon, with the most common organ affected being the stomach [2]. Rarely, the pancreas is infiltrated by plasmacytes, either as solitary plasmacytoma or extramedullary invasion by multiple myeloma

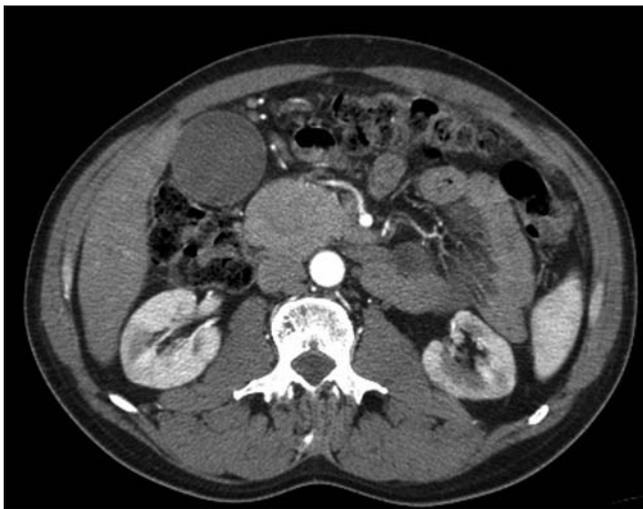


Fig. 1 Computed tomography scan showed a large and expansive lesion in the head of the pancreas.

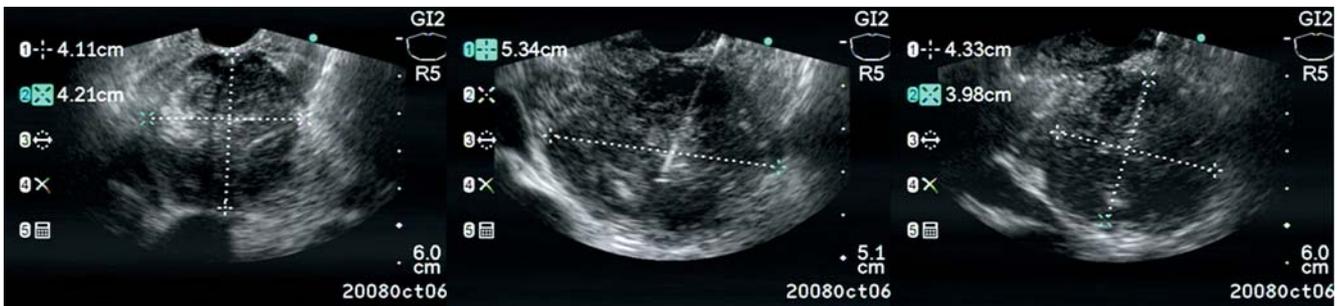


Fig. 2 Endoscopic ultrasound showing hypoechoic and heterogeneous mass in the head of the pancreas. Fine-needle aspiration was performed and samples obtained for pathological analysis.

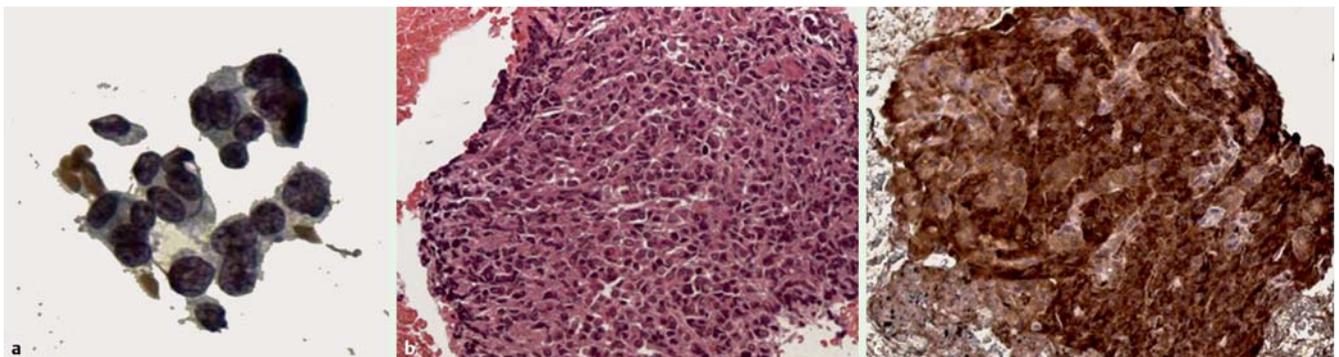


Fig. 3 Histological results. **a** Cytology ($\times 1000$). **b** Hematoxylin and eosin staining in paraffin ($\times 400$). **c** Lambda light chains ($\times 400$). All images confirmed the presence of plasmacytoma.

[3]. The diagnosis is based on the finding of extramedullary monoclonal plasma cells without proliferation of plasmacytes in bone marrow [4].

The successful use of EUS-FNA in the diagnosis of plasmacytoma is not common. EUS revealed a hypoechoic, heterogeneous, well-defined mass in the pancreatic head, and FNA cytology provided diagnostic material. Treatment options include surgery, radiotherapy, chemotherapy, or a combination of these [5].

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Competing interests: None

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