Unusual presentation of biliopancreatic cancer as a primary retroperitoneal tumor

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Conflict of interest: the authors declare no conflict of interest.

Keywords: Retroperitoneal mass. Biliopancreatic tumor. Retroperitoneal space.

Dear Editor,

Primary retroperitoneal tumors are defined as originating from the retroperitonea, without depending on any other retroperitoneal organ (1). This type of neoplasia is not common and is, therefore, difficult to diagnose (2). We report a case of a biliopancreatic adenocarcinoma with retroperitoneal localization.

Case report

A 47-year-old female was admitted to hospital due to abdominal bloating, dyspepsia, postprandial vomiting and weight loss of 10 kg in six months. An extrinsic duodenal compression was discovered by gastroscopy. An abdominal computed tomography (CT) scan showed a large mass in contact with the pancreas (although without any lesions) that surrounded the superior mesenteric artery, stenosing the third duodenal portion.
In addition, a marked right ureterohydronephrosis required a percutaneous nephrostomy. Magnetic resonance imaging was performed, showing an increased and altered contrast enhance of the mesenteric root; likewise, the pancreas was increased in size, but with a homogenous contrast enhance.

No lesions were found but multiple round adenopathies were discovered by echoendoscopy. The biopsy of one lesion was negative for malignant cells. Tumor markers were high (Ca 19-9 43, Ca-125 350 and CEA 800) and colonoscopy and mammography were normal. A huge active metabolic mass, from the anterior to the retroperitoneal area of the abdomen, was reported by positron emission tomography-computed tomography (PET-CT) scan (Fig. 1A). No biochemical and microbiological conclusive results were found in another echoendoscopy after a new sampling of the ascitic liquid. After several days of persistent vomiting due to an intestinal obstruction, a mesocolic gastroenteroanastomosis was carried out. Multiple biopsies of the tumor surrounding the third and fourth portions of the duodenum were taken (Fig. 1B), as well as a biopsy of a millimetric lesion of the third hepatic segment. The intraoperative anatomopathological findings did not clarify the origin of the neoplasia. Finally, the definitive diagnosis was established as an infiltration due to biliopancreatic adenocarcinoma based on the immunohistochemical analysis (IHQ positive to CK7, CK20, CK19 and GATA3; and negative to HEPPAR, PAX8, CDX2, SATB2 and TTF-1) (Fig. 1C).

**Discussion**

The unusual radiological presentation of a biliopancreatic adenocarcinoma which does not affect the organ in question and simulates a primary retroperitoneal tumor is a diagnostic challenge that makes this case so unusual (3). The detailed anatomopathological study of this type of tumor is essential to guide the appropriate therapeutic management.

**References**


Fig. 1. A. Positron emission tomography-computed tomography (PET-CT). Pathological deposits with poorly defined margins and heterogenous contrast enhance in mesogastrium. B. Large stenosing retroperitoneal mass surrounding the third portion of the duodenum. C. Complex glandular formations with high-grade atypical cells in the retroperitoneum (HE 100x).