

Images in EUS

Pancreatic Metastasis from Colon Carcinoma Diagnosed by Endoscopic Ultrasound Fine Needle Aspiration

Augusto P. C. Carbonari*, Mauricio S. Assef, Frank S. Nakao, Aloisio S. F. da Silva, Luciane C. do Valle, Dalton M. Chaves

Fleury Medicina e Saúde, Serviço de Endoscopia, São Paulo-SP 04735-001, Brazil

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A epigastric mass was found on examination in a 67-year-old woman with abdominal pain and 10 kg weight loss for the past 6 months. Abdominal computed tomography (CT) showed a mass in the pancreatic head and uncinate process, with a cystic central area, irregular bounds and a central small calcification. The contrast demonstrated invasion of the spleno-portal junction and superior mesenteric vein and a half circumference contact with superior mesenteric artery. The mass was 6.8 cm × 5.8 cm × 5 cm. There was, also, a possible mesenteric fat invasion, with some normal size lymph nodes and a dilatation of the proximal portion of the main pancreatic duct (Fig.1).

She underwent a right hemicolectomy 6 years ago and made an uneventful recovery. Colonoscopy showed ileocolic anastomosis without lesions. Endoscopic ultrasound (EUS) showed a hypoechoic heterogeneous lesion in the head and uncinate process of the pancreas with hyperechoic central area and well-defined limits, measuring 4 cm × 4 cm, infiltrating gastric antral mucosa and vascular structures (portal vein and superior mesenteric artery). Main pancreatic duct was dilated (4.8 mm). There was peri-pancreatic, homogeneous, well-limited lymph nodes, measuring more than 1 cm (Fig. 2A, 2B, and 2C). EUS-guided fine needle aspiration (EUS-FNA) was performed with a 22-G EchoTip® needle (Cook Medical Inc, Limerick, Ireland) and a sufficient cytology material was obtained after 3 needle passes. The slides were stained and analyzed by an on-site cytopathologist, showing a suspicious material for malignancy (Fig. 3A). The cell block histology (Fig. 3B) and immunohistochemistry (Fig. 4A, 4B, and 4C) confirmed the diagnosis of pancreatic metastasis from colon carcinoma.

Pancreatic masses remains a diagnostic challenge, even

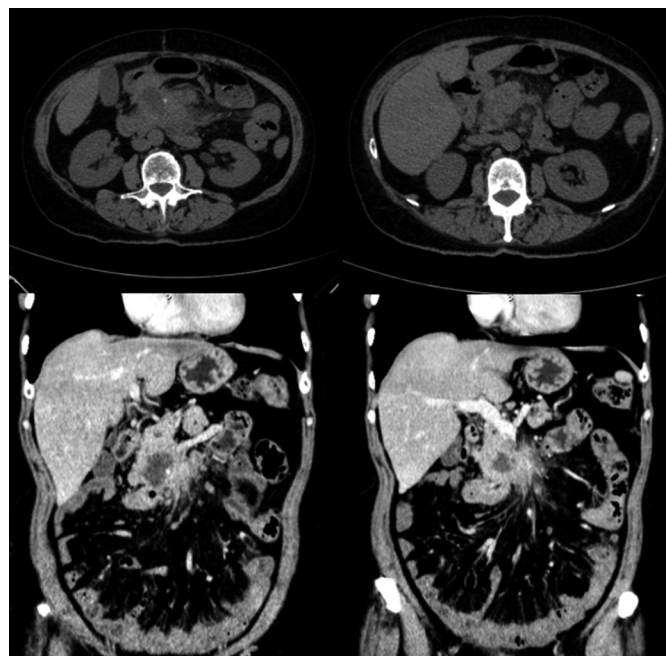


Figure 1. Computed tomography images of the pancreatic lesion.

with all procedure enhancements. All the efforts are done to make a preoperative diagnosis, reducing the morbidity of unnecessary surgical procedures. Many different histological kind of lesions, with different treatments, make tissue acquisition almost mandatory to define the sequence of procedures. In some cases, resection procedures are feasible and in others, only chemotherapy should be considered.

Pancreatic metastasis from colon carcinoma is rare and accounts for less than 2% of all pancreatic metastases.^[1,2] More frequent metastases to the pancreas are from kidney cell carcinoma, lung cancer, breast cancer and melanoma. The median interval for colorectal metastasis to the pancreas

*To whom correspondence should be addressed.

E-mail: augustocarbonari@yahoo.com.br

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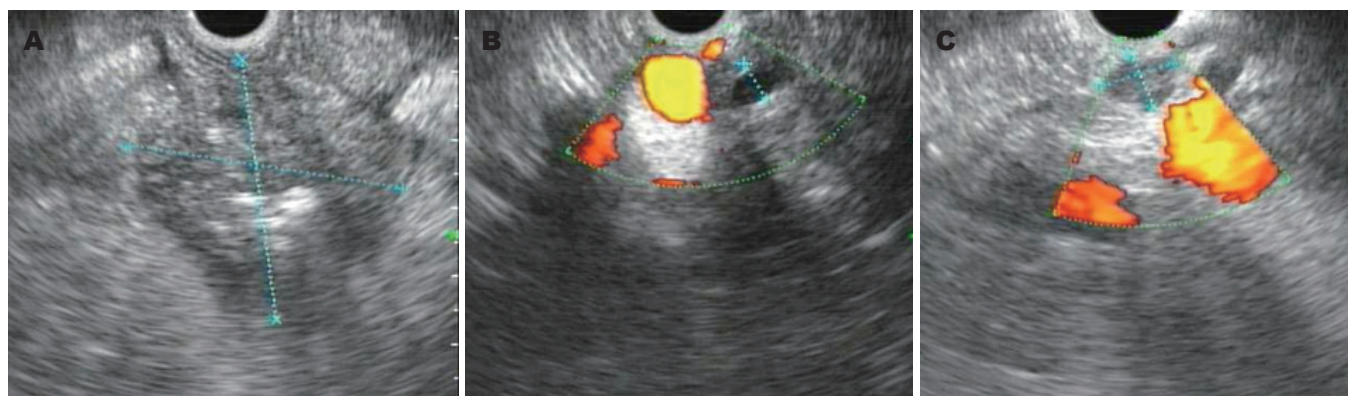


Figure 2. Endoscopic ultrasound view of a hypoechoic and heterogeneous lesion in the head and uncinated process of the pancreas (A), main pancreatic duct with 4.8mm (B) and peri-pancreatic lymph nodes (C).

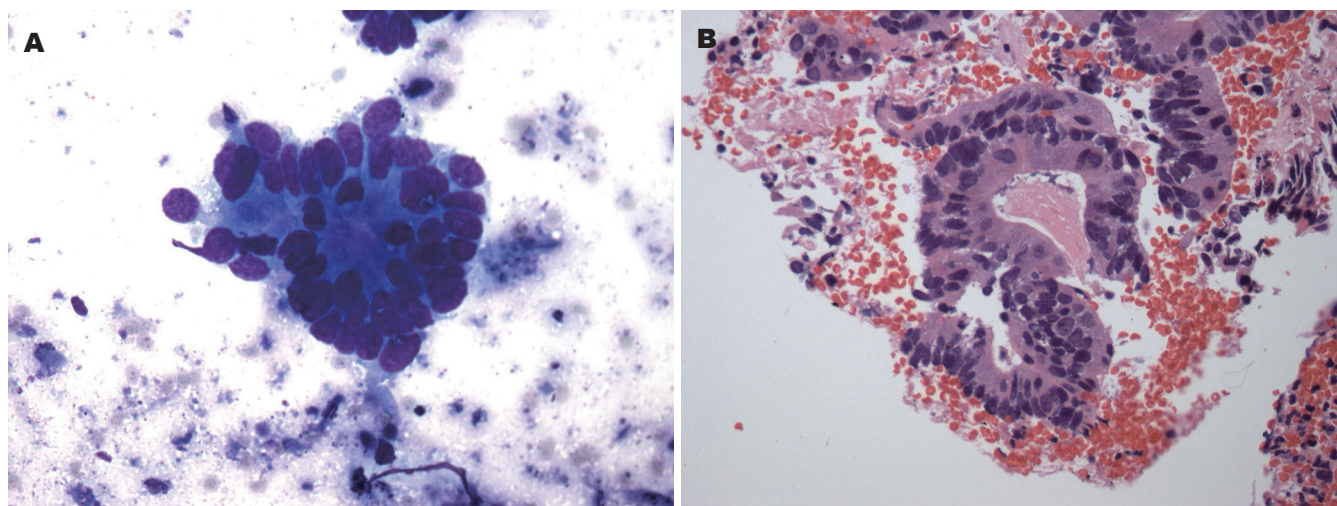


Figure 3. Rapid on-site cytopathological evaluation demonstrating a suspicious material for malignancy (A) and histological section (Hematoxylin and Eosin stain) showing pancreatic metastasis from colon carcinoma (B).

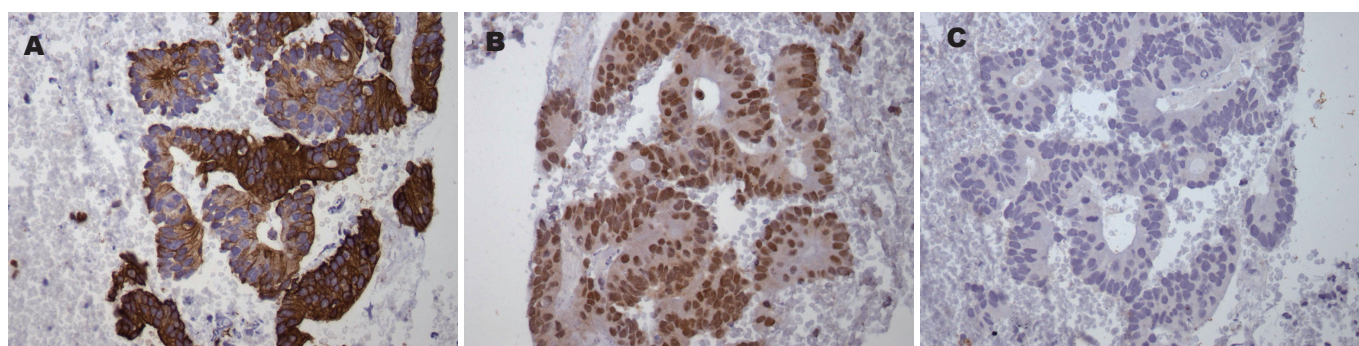


Figure 4. Histological sections (Immunohistochemistry) showing positive staining for CK20 (A), CDX2 (B) and negative staining for CK7 (C).

was found to be 24 months.^[3] EUS-FNA has been reported as a safe and minimally invasive method for diagnosing non-primary neoplasms. An accurate diagnosis is facilitated by careful evaluation of the clinical history, cytology and

histopathological study including immunohistochemistry.^[1,4] The role of treatment for metastatic colorectal tumors to the pancreas is not well-defined due to a paucity of such cases reported in the literature, with possible surgical resection or

chemotherapy. Thus, in this case, we showed a rare case of pancreatic metastasis, diagnosed by EUS-FNA, from colon carcinoma 6 years after a hemicolectomy.

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