

Mixed adenoneuroendocrine carcinoma of the colon — A complex and unique clinical duality

Keywords: Mixed adenoneuroendocrine carcinoma (MANEC).

Dear Editor,

In relation to the article “A case of mixed adenoneuroendocrine tumor of the colon” (1), we would like to contribute a new case of this exceptional and biphasic clinical entity — the MANEC (mixed adenoneuroendocrine carcinoma). These tumors represent a mix of pathological components, are highly aggressive, and affect the gastrointestinal and pancreatobiliary tract. They are characterized by the dual presence of glandular and neuroendocrine epithelial elements, where each component represents at least 30 % of the tumor (2).

CASE REPORT

A 71-year-old male presented with intestinal discomfort and constitutional syndrome. On clinical examination, he had a mass on the right flank, which was fixed and painless. Laboratory testing revealed hemoglobin at 8 g/dL, and there was an elevation of carcinoembryonic antigen at 24.34 ng/mL. Colonoscopy identified an ulcerated and necrotic neoplasm located in the right colon, and the biopsy confirmed an adenocarcinoma. A CT scan revealed an extensive tumor from the ileocecal valve to the hepatic flexure, with posterior and lateral projections, without metastasis (Fig. 1). Given these findings, a right hemicolectomy was performed with en-bloc excision, including Gerota's fascia and the right kidney fat.

The pathological analysis showed a locally advanced MANEC with free margins and CK7+, CDX2+, CK20+, chromogranin+, synaptophysin+ immunophenotype (Fig. 1), positive vascular invasion and free nodes, which was finally

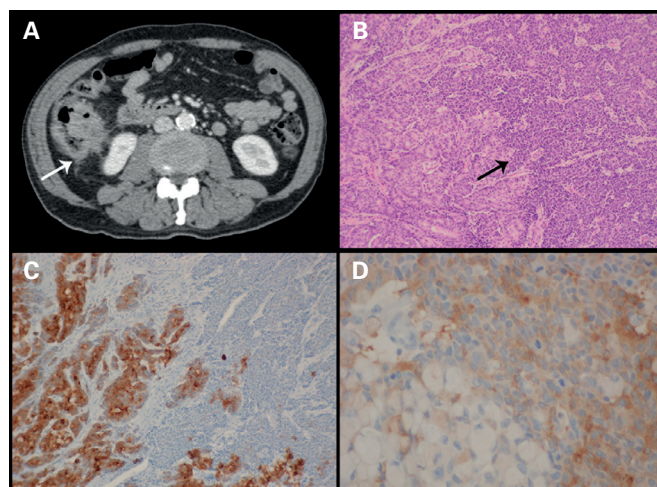


Fig. 1. A. Axial abdominal CT scan image showing a tumor in the right colon with posterior projections towards the right kidney fat. B. Histological image under a light microscope at x100 magnification, hematoxylin-eosin (HE) staining, showing the interface between the adenocarcinoma (left) and neuroendocrine carcinoma (right) components. C. Histological image at x100 magnification, CK7 staining, showing immunohistochemical positivity for CK7 in the adenocarcinoma component (left) and negativity in the neuroendocrine component (right). D) Histological image (x400) with synaptophysin staining showing positivity for synaptophysin in the cells of the neuroendocrine component (right, orange color).

classified as stage pT4bpN0M0. The patient evolved favorably.

DISCUSSION

Gastrointestinal MANECs are extremely rare and Cordier R. described the first case, which was located in the cecum, in 1924 (3). MANECs represent 3-9.6 % of colorectal tumors and the ascending colon is their main location (56 %) (4).

They are highly aggressive due to the endocrine component and may express functional intestinal hormones such as gastrin, serotonin, neurotensin, or motilin, which means that they have a poor biological behavior and increased risk of distant metastasis, mainly to the liver (5). However, its association with carcinoid syndrome has not yet been described in the literature. Surgery is the treatment of choice, and adjuvant chemotherapy is indicated according to the predominant pathological component in the MANEC.

Conflicts of interest: the authors declare none.

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