Letter to the Editor

Extensive Neuroendocrine Adenocarcinoma in Ulcerative Colitis

Joana Rita Carvalho, Samuel Raimundo Fernandes, Luís Araújo Correia

Department of Gastroenterology and Hepatology, Hospital de Santa Maria, Lisbon, Portugal

Corresponding author: Joana Rita Carvalho, MD, Rua Guilherme Faria nº 7, 2º direito, 1700-222 Lisboa, Portugal. Tel: 00351916489846; Email: joana.rita.carvalho@gmail.com

A 42-year-old male with a known history of extensive ulcerative colitis [UC] and Leiden factor V mutation was admitted with abdominal pain and bloody diarrhoea of 4 days’ duration. He had uncontrolled, steroid-dependent UC since age 23. He was intolerant to thiopurines and had failed adalimumab. Four months earlier, he was hospitalised with deep venous and renal vein thrombosis. On examination, the patient looked unwell and emaciated and presented diffuse abdominal tenderness. Blood tests revealed severe anaemia [haemoglobin 8.3 g/dl], with elevated white blood cell count [13.6 x 10^9/l], C-reactive protein [166 mg/l], and faecal calprotectin [> 5000 µg/g]. Abdominal computed tomography [CT] showed thrombosis of the inferior vena cava, and left renal, primitive, and external iliac veins. Colonoscopy presented signs of active colitis, Mayo 2 [Figure 1]. Unexpectedly, anatomopathological examination of all biopsies performed from the caecum to the rectum showed infiltration by a poorly differentiated adenocarcinoma with focal neuroendocrine differentiation [Figure 2]. The patient was referred for total colectomy but, due to the extensive thrombosis, complete resection was not possible. The surgical piece revealed multiple foci of adenocarcinoma with neuroendocrine differentiation with vascular, lymphatic, and extra-lymphatic extension [T3N2b]. The patient was scheduled for palliative radiotherapy. UC is a known risk factor for colorectal malignancy and the risk increases with the duration and the anatomical extent of the disease. Neuroendocrine carcinoma, a recently described histological subtype, has been infrequently reported in the setting of inflammatory bowel disease, and is estimated to account for less than 1% of colorectal cancers. According to Siegel et al., neuroendocrine differentiation might evolve from multipotential cells in dysplastic epithelium, suggesting that long-standing inflammation might be involved in its pathogenesis. Neuroendocrine neoplasms appear to have a dismal prognosis, often presenting with metastatic disease at diagnosis. The reported overall mean survival is only 10 months. In conclusion, we highlight a very rare histological subtype, uncommonly involving the entire colon in a young patient with UC.

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Conflict of Interest
None declared.

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References
Figure 1. Colonoscopy. There are signs of chronic colitis along the whole colon. Ascending colon (left panel) descending colon (right panel).

Figure 2. Colon biopsies showing infiltration by a poorly differentiated adenocarcinoma (left panel). Immunohistochemistry showed focal expression of chromogranin, a neuroendocrine marker.