Leptomeningeal carcinomatosis in a young patient with obstructive colorectal signet-ring cell adenocarcinoma

Key words: Leptomeningeal carcinomatosis. Signet-ring cell adenocarcinoma. Colorectal cancer.


Dear Editor,

We present the case of a young male patient who suffered from leptomeningeal carcinomatosis and comment on the pitfalls encountered during the management of this devastating illness.

A twenty-five-year-old Moroccan man came to the Emergency Department presenting with abdominal pain and constipation of a four day duration. The patient also reported rectal bleeding and weight loss. A tympanic abdomen was observed on physical examination. A rectal examination uncovered an obstructive solid mass at 6 cm from the anal verge. A CT scan revealed a large bowel obstruction due to rectal diffuse thickening. Thus, at this time a differential diagnosis of inflammatory bowel disease (IBD) or rectal neoplasia was made. Although there was no pathological report from the lesion, an emergency transverse colostomy with a rectal biopsy was carried out.

The pathology report described a signet-ring cell carcinoma originating in the rectum. Magnetic resonance imaging (MRI) showed a T2N0 large rectal neoplasia. Endoanal ultrasound revealed a T3N0 rectal tumor.

After two months of neoadjuvant therapy the patient returned to the Emergency Department due to headaches, vomiting, diplopia and a limited abduction in the right eye. A brain MRI showed protein content in the parietal sulci. A lumbar puncture was positive for malignant cells.

The patient received systemic and intrathecal chemotherapy. However, due to the poor prognosis of this disease the patient passed away eleven months after the surgery.

Discussion

A signet-ring cell adenocarcinoma of colorectal origin, which commonly presents between the fourth and sixth decades of life, can cause leptomeningeal metastasis (1-4). Due to the young age of the patient, a benign rectal obstruction was initially diagnosed, as there are various case reports of patients with IBD with a clinical presentation of a colorectal obstruction due to transmural inflammation (5). This case demonstrates how colorectal signet-ring cell adenocarcinomas cause leptomeningeal metastasis early in the course of disease.

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References