Dear Editor,

Vaginal involvement by direct extension is not uncommon in patients with locoregional recurrence of colorectal cancer. However, hematogenous metastases are exceptional.

Case report

A 67 year-old female diagnosed with a colon cancer located 20 cm from the anal margin underwent sigmoidectomy 3 years earlier. The histopathological examination showed a low-grade adenocarcinoma with 2 lymph nodes involved of 15 isolated, and the patient received adjuvant chemotherapy with 5-fluorouracil. The subsequent tests during follow-up showed no signs of recurrence. The patient consulted her gynecologist for vaginal bleeding 34 months after surgery. Physical examination showed a 4 cm ulcerated lesion located in the anterior vaginal wall in its upper third and biopsy was positive for adenocarcinoma. The blood test was remarkable for a raised CEA (13 ng/ml). Immunohistochemistry was performed on paraffin blocks of the vaginal lesion, and also of the primary tumor, showing the same pattern with strong positivity against CEA in both tumors, positivity against high and low molecular weight keratins and negativity for estrogen receptors and progesterone. Computed tomography showed no signs of thoracic and abdominal extension. Magnetic resonance imaging was performed showing an infiltrative lesion occupying the urogenital cleft with involvement of the anterior aspect of the proximal third of the vagina and loss of fat plane between the vagina and urethra (Fig. 1). With the diagnosis of metachronous vaginal metastasis in a patient with history of colon cancer, surgical treatment was indicated, and en-bloc radical cystectomy, hysterectomy, bilateral oophorectomy and resection of the anterior vaginal wall was performed. Microscopic examination confirmed the diagnosis of an intestinal-type adenocarcinoma infiltrating the outer layer of the bladder wall muscle and soft perivaginal tissues. Ten months after surgery, the patient died due to brain metastases.

Discussion

The most frequent site of colorectal cancer metastasis is the liver, followed by the lung. In contrast, vaginal metastases are exceptional. To date, only 19 cases have been published, the first one, in 1966, in a patient with a neoplasm of sigmoid colon (1-6). The largest
series included 11 patients within a broader study that analyzed 325 cases of genital metastases (3). In the vast majority of cases metastasis are metachronous diagnosed during the study of metrorrhagia (4) and are associated with a poor prognosis. Differential diagnosis includes, among others, the primary neoplasm of vagina (7). Immunohistochemistry against cytokeratins allows confirming the intestinal origin as in our case. Different forms of treatment have been described including local resection (7), radiotherapy or interstitial brachytherapy (6). Our case is the only one in which a radical cystectomy was necessary due to infiltration of the urethra.

Leyre Lorente, Sandra Alonso, Marta Pascual and Miguel Pera

Colorectal Surgery Unit. Department of Surgery.
Colorectal Cancer Research Group IMIM-Hospital del Mar.
Barcelona, Spain

References