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Pilar Ruz Zafra, María Aurora Ruz Zafra, Ángela Araujo Míguez, Juan Manuel Bozada Garcia

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## Diagnosis of metastatic angiosarcoma of the aorta in colonic lesion biopsies

- Authors:

- I. Pilar Ruz Zafra. Gastroenterology department, Hospital Virgen del Rocío, Sevilla, Spain.
- II. María Aurora Ruz Zafra. Internal Medicine Unit, Hospital de la Serranía, Ronda, Málaga. Spain.
- III. Ángela Araujo Míguez, Gastroenterology department, Hospital Virgen del Rocío, Sevilla, Spain.
- IV. Juan Manuel Bozada García. Gastroenterology department, Hospital Virgen del Rocío, Sevilla, Spain.

- Author for correspondence: Pilar Ruz Zafra ( pruzzafra@gmail.com)

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Dear Editor,

Angiosarcomas are mesenchymal neoplasms of vascular origin, and represent 1 % of all sarcomas.<sup>1</sup> The most commonly involve the skin and soft tissues, and primary gastrointestinal involvement is rare.<sup>1,2</sup> Their prognosis is poor as they are highly invasive, with a tendency to send metastases to lymph nodes, liver, lungs, heart, brain and bones.<sup>1,3</sup> Definitive diagnosis requires a histological study, these being high-grade neoplasms displaying a highly variable morphology ranging from vascular to poorly differentiated solid architecture. Epithelioid morphology is more common among gastrointestinal angiosarcomas.<sup>4</sup> Immunohistochemical analysis typically reveals CD31 and ERG. Their tendency to cause gastrointestinal bleeding is

characteristic.<sup>5</sup>

A 79-year-old male with a history of high blood pressure was admitted for acute shortness of breath from acute pulmonary edema, and an urgent angioCT scan of the chest revealed bilateral lung nodules. During an interview the patient reported weight loss over the past few months and left-side coxalgia, which had been treated as trochanteric bursitis. Laboratory findings included recent-onset normocytic anemia, and tumor markers were normal. A PET-CT scan was ordered, which revealed multiple hypermetabolic uptake foci suggestive of malignancy: lung nodules; pericardial effusion; intraluminal lesion in the abdominal aorta at L1, extending to the superior mesenteric artery origin; para-aortic adenopathies, and involvement of right renal cortex, descending colon, left wing of ilium, and left femur. Colonoscopy showed multiple erythematous lesions with raised borders and depressed, ulcerated centers that displayed a variety of sizes and were distributed throughout the colon (Figure 1); their biopsies revealed infiltration by poorly-differentiated epithelioid angiosarcoma with immunoreactivity to the ERG gene and anti-CD31 antibodies, and absence of epithelial marker immunoexpression. During admission the patient had gastrointestinal bleeding secondary to his colonic lesions, with persistent anemization and high transfusion requirements. He was assessed by Coloproctological Surgery and Vascular Radiology, which ruled out a therapeutical approach. Medical Oncology indicated palliative chemotherapy with paclitaxel 80 mg/m<sup>2</sup> weekly for three weeks with bleeding monitoring, which allowed discharge from hospital and outpatient follow-up.

Metastatic lesions to the colon are uncommon, and may be recognized from their displaying endoscopic features different to those of adenomatous polyps; they are often the most accessible route for biopsy sample collection for the diagnosis of a number of metastatic malignancies, including epithelioid angiosarcoma. Knowledge of their endoscopic morphology will allow early identification and diagnostic suspicion guidance, and prompt pathology assessment to avoid delayed

management.

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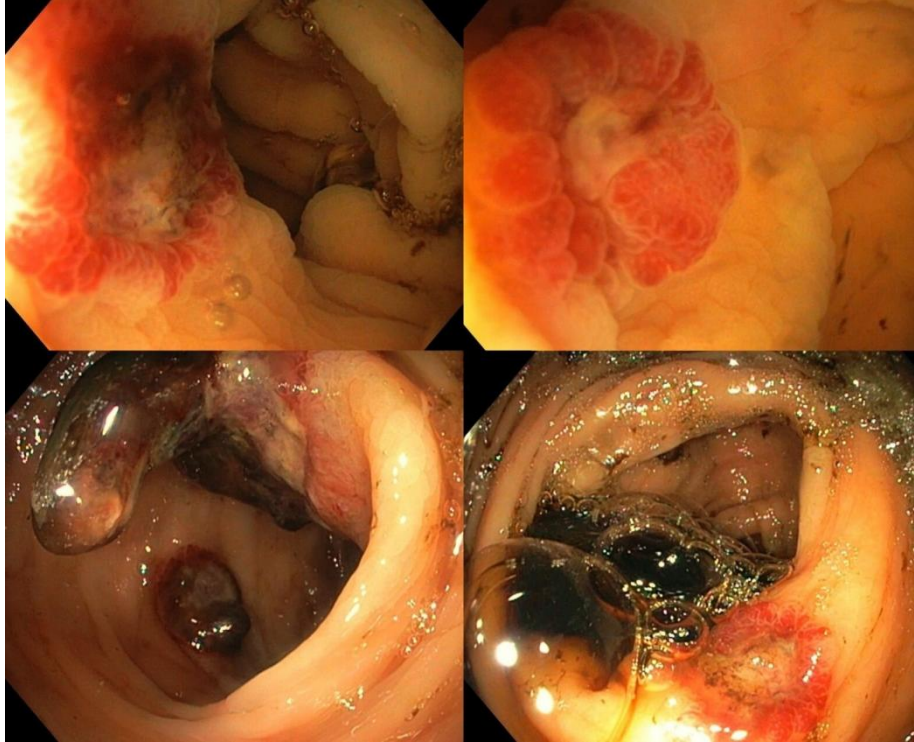


Figure 1. Erythematous lesions with a raised border and depressed, ulcerated center spread throughout the colon, suggestive of colonic metastases.