An 80-year-old man with coronary artery disease and end-stage renal disease was evaluated for hematochezia. Several days prior, the patient had developed resting chest pressure and came to our emergency department where evaluation showed non-ST elevation myocardial infarction. He was treated with high-dose aspirin, clopidogrel, and intravenous heparin and underwent cardiac catheterization with placement of a drug-eluting stent to the mid left anterior descending artery. Hematochezia was noted postprocedurally.

On further questioning, he acknowledged several months of mild hematochezia. He denied weight loss, vomiting, distention, or abdominal pain. Seventeen years ago, he received definitive external beam radiation therapy for prostate cancer. Colonoscopy 6 years ago showed colonic polyps.

Vital signs were normal, and his abdomen was not distended or tender and was without masses. The digital rectal examination was notable for a firm, rubbery mass at 5 cm that was fixed to underlying structures.

Laboratory test results were essentially unremarkable. He had stable anemia consistent with renal disease, normal tests of hepatic function, and a nonelevated chorioembryonic antigen level.

Colonoscopy was performed and revealed a 4-cm polypoid mass arising from the anterior rectal wall. The mass was submucosal with a central ulcerated portion (Figure A).

Biopsies showed multiple foci of spindle cells with pleomorphic, cigar-shaped nuclei and high mitotic activity (Figure B). Immunohistochemical stains were positive for desmin (Figure C) and smooth muscle actin but negative for C-KIT, CD34, and S-100. The patient was given the pathologic diagnosis of rectal leiomyosarcoma. Metastatic work-up was negative, and he was offered surgery but declined.

Rectal leiomyosarcomas are rare, comprising less than 10% of smooth muscle tumors and less than 0.1% of all colorectal malignancies. There are only 3 other case reports of rectal leiomyosarcoma arising in the context of radiation treatment. Five-year survival for aggressive soft tissue sarcomas is less than 20%, and tumors that form in the context of radiation may carry a particularly poor prognosis.

References

Conflicts of interest
The authors disclose no conflicts.
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