

Prolapsed Rectal Fibrosarcoma in a Young Male

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Rectal sarcomas are rare tumors. Following is a report on a 28 year-old male who presented with an irreducible prolapsed rectal tumor. The discussion focuses on the work-up, surgical management and adjuvant treatment of the case.

Key words: sarcoma, neoplasm, rectal disease, surgery

The Case

A 28 year-old male presented at the Emergency Department with a prolapsed rectal tumor. (Figure 1) The patient has already previously been experiencing recurrent episodes of tumor prolapse, which he managed to reduce manually. He, however, only sought consult after failure to reduce the prolapse. The physical examination of the patient was unremarkable except for the presence of 7cm x 8cm x 8cm prolapsing rectal tumor. A colonoscopy revealed no synchronous lesions. An abdominopelvic computed tomography (CT) scan demonstrated the grossly apparent mass. There was no evidence of liver metastases, mesorectal stranding or carcinomatosis. Serum carcinoembryonic antigen level was normal. With the patient in lithotomy position, a midline laparotomy was performed with an attempt to reduce the tumor. Proving unsuccessful, the authors then proceeded to perform an Altemeier procedure to remove the tumor. (Figures 2 & 3) Finding the inferior mesenteric artery (IMA) studded with nodes, the authors proceeded with high ligation of the inferior mesenteric vessels, total mesorectal excision and mucosectomy to allow for lymph node clearance. Rectal reconstruction was performed with a handsewn coloanal anastomosis.

The histopathology report showed: "spindle and epithelioid malignant neoplasm with infiltration to the muscularis propria." Considerations were: mucosal malignant melanoma, leiomyosarcoma and gastrointestinal stromal tumor. One of 30 harvested lymph nodes was positive for tumor. Further investigation with immunohistochemical staining revealed the tumor to be positive for vimentin, but negative for CD 117 and s100. With a diagnosis of fibrosarcoma, the patient was started on a chemotherapy regimen of Mesna, Doxorubicin, Ifosfamide and Dacarbazine. All phases of the patient's management was conducted within a multidisciplinary team setting.

Discussion

The case presented demonstrates a rare presentation of fibrosarcoma. The incidence of fibrosarcoma confined to the rectum is rare.¹⁻³ Furthermore, the authors failed to find a similar case in literature of such a malignancy presenting as an irreducible tumor prolapse. Due to the urgency of addressing the prolapse for fear of possible bowel strangulation and gangrene, and after failed attempts at reducing the prolapse with the use of hyperosmolar solutions, the authors deemed it unwise to wait for a more definite histologic diagnosis. Based on the gross tumor characteristics, it was most prudent to regard the lesion as malignant, and adhere to oncologic principles in the surgical approach. After histopathologic and immunohistologic staining studies, the final diagnosis was determined to be fibrosarcoma Stage III (pT2N1M0).



Figure 1. An irreducible tumor prolapse in a 28 year-old male with a three-month history of prolapse and hematochezia. UP-PGH, 2012.

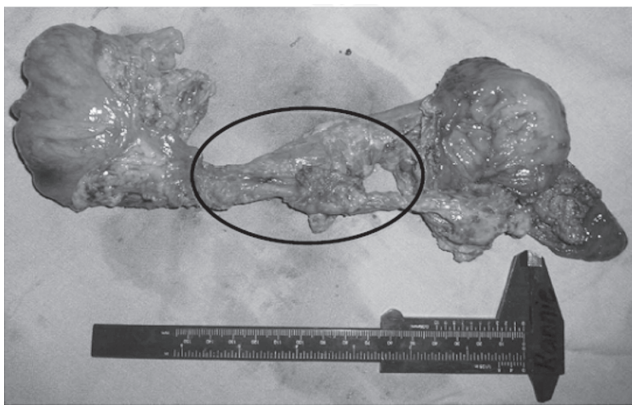


Figure 3. The rest of the rectum and the distal sigmoid. The encircled segment is the site of the initially resected segment containing the tumor. UP-PGH, 2012.

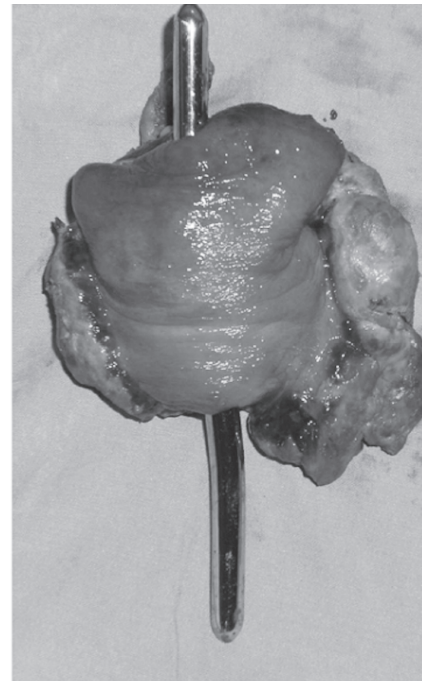


Figure 2. The resected specimen after a modified Altemeier procedure. UP-PGH, 2012.

The authors were able to harvest 30 lymph nodes, with one of these being positive for malignancy. All margins of resection were negative for tumor. At present, the patient is completing chemotherapy.

Conclusion

The authors have illustrated the management of a rare disease entity with a rare clinical presentation, where strict adherence to oncologic principles was maintained despite the urgent nature of the case.

References

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