CASE SNIPPETS

Bleeding Ileal Schwannoma

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Abstract

We report a case of ileal schwannoma who presented with bleeding per rectum. Three-vessel angiogram was the only diagnostic investigation, and revealed tumor blush in the mid-ileal region. On exploration, an intraluminal mass was found in the mid-ileal region along with a feeding vessel in the mesentery. Resection of the involved ileum with end-to-end anastomosis was done. Histopathology showed benign schwannoma of ileum involving the submucosa, muscularis propria and serosa.


Key words: Small bowel tumor

Schwannomas arise from Schwann cell derivatives, a cell species that produces collagen as well as myelin. Malignant schwannoma is usually associated with von Recklinghausen's disease and may present with pain, bowel obstruction or gastrointestinal bleed.1 Isolated intestinal schwannoma is rare, occurring most frequently in the stomach.

A 38-year-old man presented with melaena for 4 months and fresh bleeding per rectum for one day. There was no history suggestive of peptic ulcer disease, portal hypertension, or drug or alcohol ingestion. On examination, the patient appeared pale and was hypotensive. General examination revealed no abnormality. Per abdominal examination was essentially normal with no tenderness, guarding or organomegaly. Rectal examination revealed fresh bleeding per rectum. Hemoglobin was 3.5 gldl. Upper gastrointestinal endoscopy and colonoscopy did not reveal the site of bleeding. Abdomen ultrasonography was not informative. Three-vessel angiogram showed a tumor blush in the mid-ileal region, measuring 5 cm x 3 cm. The patient was explored after stabilization of vital parameters.

Exploration showed an intraluminal tumor in the mid-ileal region, measuring 5 cm x 4 cm. It was hard, greyish, and showed areas of hemorrhage and necrosis. It had a prominent feeding vessel. The rest of the bowel, liver and spleen were normal. There was no free fluid in the abdomen. With a clearance of 5 cm on either side of the lesion, resection-anastomosis of the ileum was done. On histology, the tumor involved the submucosa, muscularis propria and serosa. There were spindle-shaped cells with oval to elongated nuclei. Areas of compactly arranged cells as well as areas of low cellularity with loose arrangements were seen. There were no mitotic figures. Resection margins were free of tumor.

Fig. Three-vessel angiogram of ileal schwannoma (shown with arrows).

Most mesodermally-derived neoplasms of the small intestine tend to be hypervascular with pronounced tumor blush, venous lakes and displacement of normal arteries.2 Grossly, endoscopically and radiologically, localized Schwann cell tumors may be indistinguishable from other mesenchymal tumors. Angiography may fail to diagnose the lesion. They may or may not be encapsulated, and arise from the mucosa, submucosa or serosa. A majority of lesions are in the myenteric plexus. Neurilemmomas (benign schwannomas) are encapsulated lesions composed almost entirely of Schwann cells without neurons. Cellular (Antoni A) areas and reticulated (Antoni B) areas are often seen. These tumors have prominent blood vessels with thick hyalinized wall. Neurilemmomas almost never undergo malignant transformation. Malignant schwannomas are diagnosed on the basis of mitotic divisions seen on histology. These tumors have a poor prognosis, with only 50% survival at 2 years.

References