

Clinical Images

Large intra-abdominal dermoid cyst presenting as small bowel volvulus

Suneed Kumar*, Gurudutt Varty

Department of General Surgery, Indira Gandhi Government Medical College, CA Road, Nagpur - 440008, Maharashtra, India

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***Correspondence:**

Dr. Suneed Kumar,

E-mail: suneed.kumar@gmail.com

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ABSTRACT

Intestinal obstruction is one of the commonest abdominal emergencies requiring surgical intervention. Among its numerous causes, volvulus of the small and large bowel plays a less common aetiological role. This is a rare case of a large intra-abdominal dermoid cyst causing small bowel volvulus and presenting as obstruction. 46-year-old male presented with four-day history suggestive of acute small bowel obstruction, with gross abdominal distension on examination. With minimal investigations, he was explored to reveal a large 10×8 cm sized cystic mass in lower abdomen, with two vascular pedicles causing twisting of small bowel and resultant obstruction. Surgical intervention included unwinding of viable bowel, dividing pedicles and excision of the mass. The cyst was found to contain pultaceous material with hair and solid components. Patient tolerated the procedure well and was asymptomatic on discharge and subsequent follow-ups. This case illustrates an uncommon cause of a common presentation; an uncommon location of a relatively common cystic swelling; and the diagnostic surprise that was encountered during the management, thereby reiterating the need for keen observation and clinical acumen while dealing with such cases.

Keywords: Abdominal cyst, Intestinal obstruction, Rare presentation, Teratoma

A 46-year-old male patient, farmer from central India, presented with complaints of abdominal pain, distension, bilious vomiting and distension and altered bowel habits for four days duration. He was otherwise healthy, with no previous co-morbidities or addictions. Examination revealed a grossly distended abdomen with loss of tympanic note on lower abdominal percussion. Plain radiography revealed jejunal and ileal loop dilatation and multiple air-fluid levels. Laboratory parameters showed electrolyte derangements requiring corrections. Owing to no improvement in clinical status of patient despite 24 hours of conservative management, he was taken up for exploratory laparotomy.

Midline laparotomy revealed a large mass, measuring 10×8 cm size, occupying the hypogastrium and bilateral iliac fossae. It was cystic with areas of variegated consistency. There were two obvious pedicles straddling the mass, providing vascularity to the lesion; and loops of

small bowel were found to twist around this pedicle. The proximal bowel loops, comprising entire jejunum and proximal ileum were dilated, with collapsed distal bowel and colon.

The bowel was viable showing good vascularity and peristalsis; thus was detorted, and separated from the mass. Milking of the bowel successfully relieved the obstruction and allowed distal flow of luminal content. Next, the pedicles were isolated (Figure), doubly ligated and divided. Finally, the mass lesion was excised intact from surrounding small and large bowel serosa and mesentery. There was no obvious retroperitoneal or pelvic extension of the mass.

Closure was performed without any drainage. Cut open specimen of the mass revealed pultaceous material, with traces of hair and solid components, thus confirming the diagnosis of dermoid cyst. Post-operative recovery was

good. Since no bowel resection was performed, he was started on oral diet from the next day, and discharged by fifth post-operative day.

The patient was followed-up for two months, till which time he was asymptomatic and functioning well.

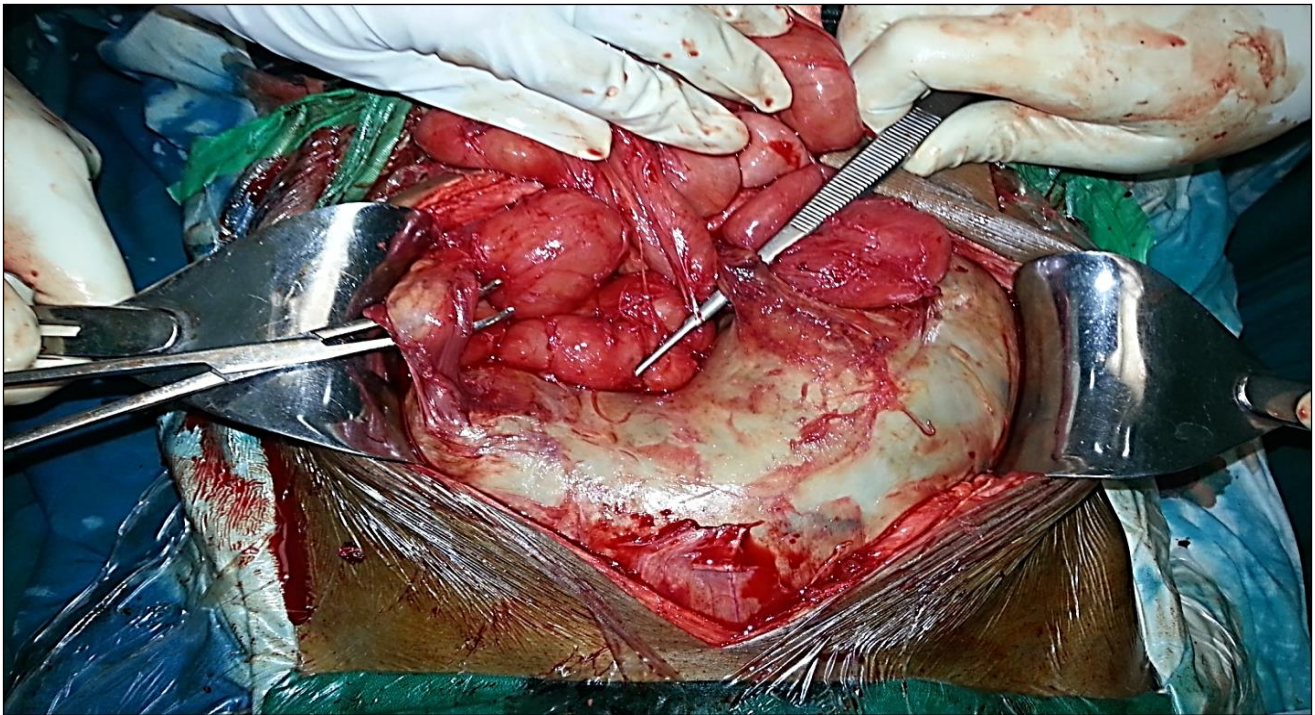


Figure 1: Midline laparotomy showing large dermoid cyst with two isolated pedicles and surrounding small bowel.

Cystic lesions in the abdomen are commonly mesenteric cysts or pseudocysts, either primary or secondary to any inflammatory pathology.¹ Dermoid cysts or mature cystic teratomas arise from totipotent germ cells and contain mature elements arising from different cell lineages. Abdominal dermoids have been known to arise from gonadal tissue, namely ovaries in females and undescended testes in males.² Primary mesenteric dermoid cysts are rare, and have been reported in several case reports in world literature, most of which presented due to pressure symptoms.²⁻⁴ The treatment of choice is surgical excision, with rare complications mainly related to recurrence or malignant transformation of the cyst.

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REFERENCES

1. Er A, Kaymakcioglu N, Cerci C. Giant abdominal mesenteric cyst. *Eur J Gen Med.* 2009;6(3):189-93.
2. Senthilnathan R, Vivek S. Dermoid cyst of an undescended intra-abdominal testis with torsion: a rare case report. *J Ind Assoc Pediatr Surg.* 2016;21:36-7.
3. Punguyire D, Iserson KV. Mesenteric dermoid cyst in a child. *Pan Afr Med J.* 2011;10:41.
4. Becher P, Ringelhahn B, Sipos J, Juhasz A. Intraabdominal dermoid cyst in the differential diagnosis of ascites. *Dtsch Med Wochenschr.* 2007;132(45):2375-7.

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