

Desmoid Infiltrating Ileum, a Rare Complication

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Abstract The desmoid tumor is an uncommon neoplasm that occurs sporadically or as a part of inherited syndrome. Desmoid tumors are benign, but may infiltrate adjacent structures. Rarely severe and fatal, clinical problems are seen if mesenteric vessels or abdominal organs are involved. Ileum is one of the rare sites and literature search regarding this yielded scant results. Hence, we decided to report this case of aggressive desmoid tumors of the abdominal wall infiltrating ileum.

Keywords Aggressive fibromatosis · Desmoid tumor · Small bowel infiltration

Introduction

The desmoid tumor, also known as aggressive fibromatosis, is an uncommon neoplasm that occurs sporadically or as a part of inherited syndrome. These tumors are histologically benign fibrous neoplasms originating from musculoaponeurotic

structures throughout the body [1]. The incidence of desmoid tumors is 2.4–4.3 cases per million population [2]. They do not metastasize but may infiltrate adjacent structures, extend along fascial planes, engulf and compress blood vessels, nerves, ureters, and hollow organs of the abdomen. Severe and fatal complications occur especially if mesenteric vessels or abdominal organs are obstructed. Other complications include bowel perforation, fistulization, and bleeding [3].

Case Report

A 65-year-old woman presented with a suprapubic mass of 3-week duration with dull aching pain. A known diabetic patient, she had undergone abdominal hysterectomy 6 months prior for fibroid uterus. Examination revealed a 6 cm × 8 cm hard, parietal wall mass in the scar region with restricted mobility.

CT scan suggested the presence of multilocular abscess/inflammatory lesions with fistulous communication to the underlying small bowel loops with resultant bowel wall thickening (Fig. 1). Fine-needle aspiration cytology showed benign spindle cells with scanty cellularity and reported as inconclusive.

Intraoperatively, the mass was arising from the fascia, involving rectus muscle (Fig. 2) infiltrating ileum with fistulous communication with the tumor (Fig. 3). Wide excision along with segmental resection of ileum was carried out. Intestinal continuity was achieved and the abdominal wall defect was repaired with Prolene mesh. Postoperative recovery was uneventful.

Histopathology examination showed a desmoid tumor infiltrating the small intestine with cut margins clear from the tumor.

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Fig. 1 CT film with arrow showing abscess cavity and gut communication



Discussion

The desmoid tumor, also known as aggressive fibromatosis, is an uncommon neoplasm that occurs sporadically. It can be part of inherited syndrome of familial adenomatous polyposis. It may arise from fascia or muscle and has been classified as superficial (fascial) or deep (musculoaponeurotic). Deep fibromatosis has relatively rapid growth rate, often attains large size, has high rate of local recurrence, and involves the musculature

of the trunk and extremities. Desmoid tumors are also classified as extra-abdominal, abdominal, and intra-abdominal [1].

The abdominal desmoid tumors typically occur in young women during gestation or within a year of childbirth. Use of oral contraceptive pills is associated with these tumors [1]. History of surgical trauma is elicited in one out of four cases [4]. Desmoid tumors do not metastasize but may infiltrate adjacent structures, extend along fascial planes, engulf and compress blood vessels, nerves, ureters and hollow organs of the abdomen.

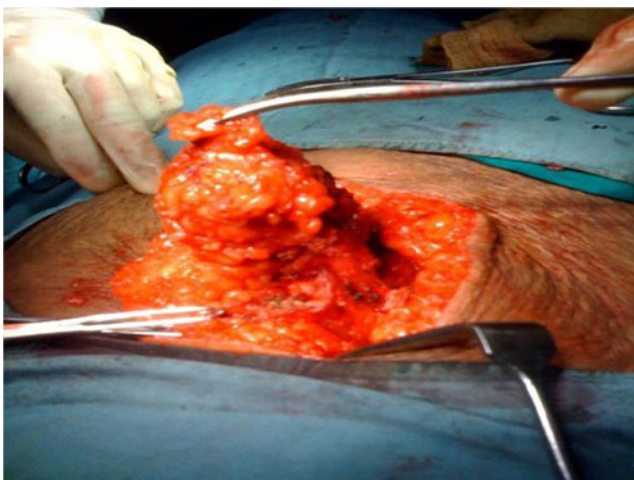


Fig. 2 Operative photograph showing excised mass from abdominal wall

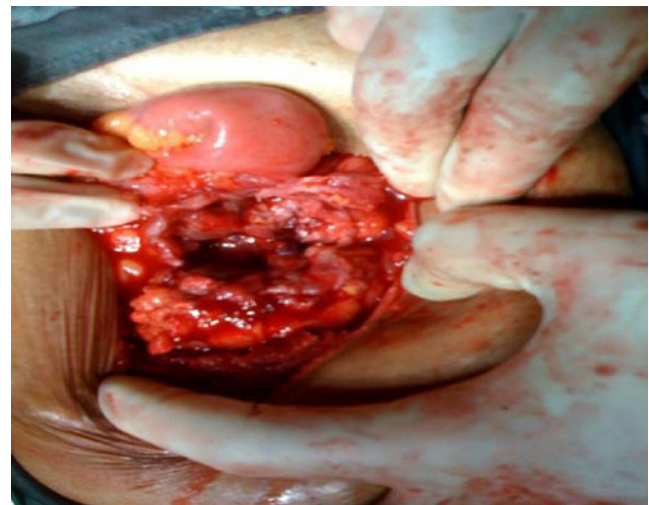


Fig. 3 Opened mass showing abscess cavity with gut communication

CT and MRI provide information regarding the extent of the tumor and its relationship with intra-abdominal organs.

Differentiation from other solid tumors is impossible using morphological criteria. Histology is the only method which demonstrates long fascicles of spindle cells of variable cell density with a few mitoses and absence of atypical nucleus separations.

Characteristically, there is diffuse cell infiltration of adjacent tissue structures [5].

The choice of therapy is controversial. The treatment for abdominal wall desmoid is complete resection with tumor-free margins. Local recurrence rate is around 40 % [1]. The effectiveness and indication for adjuvant radiation is not yet proved. In a comparative analysis, significantly better local recurrence control was described with radiation and combined surgical resection in comparison to resection only. However, these results are achieved with higher complication rates. Anti-inflammatory treatment, hormone therapy, and chemotherapy are not shown to be effective.

Wide resection with tumor-free margins remains the most effective treatment for accessible and smaller desmoid tumors [5].

Conclusion

Desmoid tumors, though benign, can infiltrate adjacent structures resulting in a wide variety of complications, which are to be taken into consideration before surgery.

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