Intramesosigmoid Hernia

An internal hernia is a protrusion of a viscus through a peritoneal or mesenteric aperture within the confines of the peritoneal cavity.\(^1\) Defects can be congenital; more commonly the orifice is acquired after inflammation, trauma, or intraabdominal surgery.\(^2\) These hernias are usually diagnosed after an intestinal segment becomes incarcerated within the internal defect, resulting in bowel obstruction. Symptoms usually include vomiting, bloating, pain, and obstruction. Physical examination findings include abdominal distention and tenderness.

There are several types of internal hernias based on location. More common types are paraduodenal (53%), pericecal (13%), foramen epiploicum (8%), transmesenteric and transmesocolic (8%), and retroanastomotic (5%).\(^3\) Only 5% of internal hernias involve the sigmoid mesocolon, and there are 3 types:\(^4\) (1) the intersigmoideal hernia, which arises in the congenital fossa located in the attachment of the lateral aspect of the sigmoid mesocolon to the posterior abdominal wall; (2) the transmesosigmoid hernia, which occurs when loops of intestine pass through a defect in the sigmoid mesocolon; and (3) intramesosigmoid hernia, which occurs when the defect in the sigmoid mesocolon affects only the medial leaflet of the peritoneum and the hernia sac lies within the sigmoid mesocolon itself.

Ours was a case of an intramesosigmoid hernia, the least common of the 3 types of sigmoid-related hernias.\(^5\) There are several theories as to how this defect arises. It has been suggested that the mesenteric defect is due to partial regression of the dorsal mesentery or to inadequate vascularity of the enlarging mesentery during development.\(^6\) Alternatively, the mesentery can be torn following abdominal trauma or caused by previous surgical procedures.\(^7\)

Only rarely is an internal hernia diagnosed preoperatively with radiologic studies.\(^8\) Intramesosigmoid hernias may be diagnosed by barium enema radiography or computed tomography.\(^9\) In a review of 17 cases of internal hernias, it was found that an abnormal cluster of small-bowel loops adjacent to the colon with central displacement of the colon and engorgement of mesenteric vessels suggested intramesosigmoid hernia.\(^10\)

The treatment of internal hernias requires surgical reduction of the hernia and repair of the defect. In these cases there is a high incidence of bowel ischemia and infarction, and resection of the small-bowel segment may be necessary.

In cases of small-bowel obstruction without previous abdominal surgery, an internal hernia should be considered in the differential diagnosis. If suspected, prompt surgical intervention must be initiated to avoid significant morbidity and mortality.

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REFERENCES


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