

Strangulated Left Giant Spigelian Hernia: A Rare Cause of Mechanical Small Bowel Obstruction

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ABSTRACT

Spigelian hernia is an uncommon abdominal wall hernia with an incarceration rate of about 20%. However, complications such as intestinal strangulation are extremely rare. We report this rare case of strangulated left giant spigelian hernia, in a 68 year-old woman, requiring emergency surgery.

Key words Intestinal strangulation, Giant, Spigelian Hernia.

INTRODUCTION:

Spigelian hernia is a rare abdominal wall hernia.¹⁻³ It occurs through an abdominal wall defect in the spigelian zone which is the zone of transition, 3 -37 mm wide, between the medial border of the muscular fibres and aponeurosis of the transversus abdominis muscle and lateral margin of the anterior lamina of the rectus sheath.² Although the hernia may arise anywhere along the zone from the costal margin to the pubic bone, the usual site is at or below the arcuate line.² The absence of posterior rectus sheath fascia may contribute to an inherent weakness in this area.

Most spigelian hernias are small (1-2 cm in diameter) and develop during the fourth to seventh decades of life.^{2,3} Patients often present with localized pain in the area without a bulge because the hernia lies beneath the intact external oblique aponeurosis. Ultrasound or computerized tomography of the abdomen can be useful to establish the diagnosis.^{2,3} Operative repair of spigelian hernia is always advocated, because of the risk of strangulation associated, with its relatively narrow neck.^{2,3} Recurrence occurs in about 4% cases.²

CASE REPORT:

A 68-year-old woman was brought to the emergency department with colicky central abdominal pain and projectile vomiting of about 9-hours duration. There was preceding 6-month history of intermittent left

lower abdominal protrusion which became irreducible about 9-hours prior to the presentation.

There was no history of previous surgery or any medical illness. On examination she was in painful distress, but afebrile. Abdominal examination revealed a firm 10 cm x 12 cm tender mass in the left lower quadrant (Fig I), but there was no sign of generalized peritonitis. The bowel sounds were hyperactive. Abdominal radiographs showed multiple air-fluid levels in the small bowel. Diagnosis of strangulated left Spigelian hernia was made and the patient had an emergency operation under general anaesthesia. Peroperatively the hernia sac was found extending through the transversus abdominis fascia and internal oblique muscle. The sac, when opened, revealed accumulated extravasated fluid which was drained and the strangulated but viable small bowel was returned to the peritoneal cavity (Fig II). The abdominal wall defect about 4 cm in diameter, was

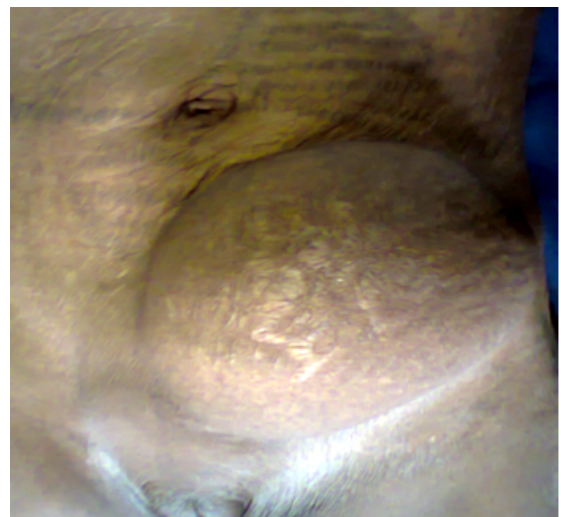


Figure I: Patient with bulge in anterior abdominal wall.

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repaired in successive anatomical layers (Fig III). The patient made good recovery and was discharged on postoperative day-6.



Figure II: Hernial sac at operation.



Figure III: Defect of hernia being repaired.

DISCUSSION:

Spigelian hernia is named after Adrian Van De Spieghel (1578-1625), Professor of Anatomy, in Italy, who first described the semilunar line, although, the hernia was first described by Klinkosch in 1764. It is one of the uncommon abdominal wall hernias constituting only about 0.12%.⁴ The peak incidence is in the 4th to 7th decades of life. The male to female ratio is 1:1. It has an incarceration rate of about 20%. The hernia sac usually contains the greater omentum.¹ However, involvement of other organs such as small intestine, colon, stomach, gallbladder, Meckel's diverticulum, appendix, ovaries and testes, has been reported.⁵⁻⁷ Many reports have emphasized the difficulty in making the diagnosis because of the nonspecific symptoms, their small size, the intramural location of the hernia and non-diagnostic findings

on plain abdominal radiographs.^{1,5-7}

Spigelian hernias occur twice as often on the right abdominal wall compared to the left. It is highly unusual for these hernias to present with bilateral disease.⁸ Only about 50% of cases are diagnosed preoperatively.^{9,10} A high index of suspicion is required for accurate diagnosis. The patient may have a classical lump when he or she stands. The lump is painful when the patient stretches and disappears on lying down.⁴ This is similar to the earlier stage of the case being reported before it became strangulated. Radiologic studies may facilitate the diagnosis of Spigelian hernias, which ultimately require operative repair. An anterior or posterior approach can be taken for the repair with increasing use of laparoscopic repairs in uncomplicated cases.⁸ Though spigelian hernia is an uncommon entity, it can mimic many other abdominal wall masses and thus it should be considered as a differential when evaluating such patients.

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