



Spigelian hernia

Rajbhandari A¹, Shrestha M L¹

¹Nepal Medical College Teaching Hospital

ABSTRACT

Spigelian hernia is a rare ventral hernia which occurs due to defect / weakness in the spigelian fascia. They are difficult to diagnose and have vague symptoms. We report a 62 year male who presented with a left lower abdominal lump after a fall. A diagnosis of left spigelian hernia was made after clinical examination and confirmed by ultrasound. He underwent mesh repair and had an uneventful post operative period.

Key words: *spigelian hernia, spigelian fascia, hernioplasty*

CASE HISTORY

A 62 year male had presented with a history of a bulge through his left lower abdominal region, which appeared after slipping down a slope ten months ago. Mass was initially small in size and associated with discomfort and appeared after coughing and eating. It could be manually reduced. It was associated with moderate pain with radiation to the back. There was no nausea, vomiting, constipation, abdominal distention or chronic cough. His bowel and bladder habits were normal. He used to do moderate amount of exercise. He had undergone angioplasty 5 years ago. He did not consume alcohol or cigarettes.

On examination, vitals were stable. Per abdominal examination revealed a vague soft, non tender mass 3 X 3 cm, which could be felt on the left lower abdomen on standing position and was reducible on supine position and could be manually reduced on standing. (Figure 1)

His blood investigations were within normal limits. His abdominal ultrasound revealed a small anterior wall reducible hernia in left lower abdomen just lateral to rectus sheath, hernial neck measuring 10 mm wide and sac measuring 30 X 27 mm. hernial sac contains thickened bowel loops with minimal inter loop fluid - features of spigelian hernia (Figure 2).

CORRESPONDENCE

Dr. Ashish Rajbhandari

Department of Surgery, Nepal Medical College

Teaching Hospital, Jorpathi, Kathmandu, Nepal

E-mail: ashish_rajbhandari@hotmail.com

He underwent mesh repair with the intra operative findings of left spigelian hernia – 4 cm size, which contained bowel loops. (Figure 3) He had an uneventful post operative stay and was discharged on the 7th post operative day.

DISCUSSION

Spigelian hernias are rare and generally difficult to diagnose. It is a type of ventral hernia. It is defined as a protrusion of preperitoneal fat, a sac of peritoneum, an organ, through a congenital or acquired defect or weakness in the Spigelian fascia.^{1, 2} Josef. T Klinkosct was the first to refer this condition as a hernia in 1764.³ Commonly, the patient is over the age of 50 years. Men and women are equally affected.⁴ Its true incidence is not known; however up till the turn of the last century about 1000 cases had been reported in literature.

It is usually located between the different muscle layers of the abdominal wall; and is also called as interparietal, interstitial, intermuscular, intramuscular or intra-mural hernia. The majority of spigelian hernias are found in a transverse band lying 0-6 cm cranial to a line running between both anterior superior iliac spines referred to as the spigelian hernia belt where the spigelian fascia is the widest.³ Low spigelian hernias penetrate the spigelian fascia within the Hasselbach's triangle caudal and medial to the inferior epigastric vessels. Most spigelian hernias occur below the level of the umbilicus close to the level of the arcuate line; though they do occur above the level of the umbilicus.⁵ There is a risk for incarceration and strangulation. The pain varies in type, severity, location and can be provoked or aggravated by maneuvers that increase intra abdominal pressure and is relieved by rest.¹ Palpable hernia and orifice facilitate diagnosis. Patients, who do have pain, but have no visible or palpable mass present the greatest difficulty in diagnosis. The common symptoms are abdominal pain, a mass in the anterior abdominal wall or signs of incarceration.

Clinical examination is the mainstay of the diagnosis. It should be carried out while the patient alternately tenses and relaxes the abdominal muscles. On palpation the hernia is pressed against the hernial ring when the intra-abdominal pressure is raised. Ultrasound is a valuable diagnostic tool for spigelian hernias. A CT scan is only required to rule out lipoma or a parietal abscess.⁶

A gridiron incision is excellent for operations for palpable hernias. If the hernia cannot be palpated preoperatively a vertical incision is recommended. This gives good exposure, facilitates hernioplasty, and permits preperitoneal exploration. External oblique fascia is incised and muscle is split to identify the sac posterior to the muscle. Spangen recommended simple closure of the defect in the form of hernioraphy¹. Nozoe et al performed a simple hernioplasty by suturing the



Figure 1 – Spigelian Hernia



Figure 2. USG finding of hernial sac



Figure 3. Hernial sac

internal oblique and transversus muscles to the rectus sheath.⁷ Development of mesh and concept of tension free application to other hernias by Liechtenstein led to its use by many for spigelian hernias. Tension free fascia lata graft or mesh repair is also employed for the repair of spigelian hernias.³ Spigelian hernias are ideally suited to preperitoneal laparoscopic repair because the defect in the Spigelian aponeurosis is more clearly identified in the preperitoneal plane. The best results are offered by the extra peritoneal laparoscopic approach.⁸

REFERENCES

1. Spangen L-Spigelian hernia. *Surg Clin North Am*. 1984;64:351-66.
2. Kalaba Z-Spigelian hernia: a case of typical Spigelian hernia in an elderly man. *Ugeskr Laeger*. 1999;161:2095-6.
3. Ray NK, Screera PN, Krisnaparsad MK. Spigelian Hernia, Fascia Lata repair is an alternative option in absence of prolene mesh. *JIMA*. 2002;100 (6):1-2.
4. James Mc Moran, Damain C. Crowther et al. Spigelian hernia. Gp notebook [serial online], [cited 2004 17 Jan], [2 screens]. Available URL [http:// www.gpnotebook.co.uk simplepage.cfm?ID=322240537](http://www.gpnotebook.co.uk/simplepage.cfm?ID=322240537).
5. Rehman JM, Seow CS, O'Dwyer PJ. A case of a spigelian hernia at an unusually high anatomical location. *R Coll Surg Edin*. 2000;45:196-7.
6. Raveenthiran V, Pichumani S. Richter's hernia in spigelian hernia. *Indian J Gastroenterol*. 2000;19:36-7.
7. Nozoe T, Funahashi S, Kipamura M, Ishikawa H, Suehiro T, Iso Y, et al. Ileus with incarceration of spigelian hernia. *Hepatogastroenterology*. 1999;46:1010-2.
8. Moreno-Egea, Flores B, Girela E, Martin JG, Aguayo JL, Canteras M. Spigelian hernia: bibliographical study and presentation of a series of 28 patients. *Hernia*. 2002;6:167-70.