

RESEARCH ARTICLE

SPIGELIAN HERNIA IN A VIRGIN ABDOMEN - AN ENIGMATIC CASE REPORT ON A COINCIDENTAL FINDING DURING TOTAL LAPAROSCOPIC HYSTERECTOMY

Dr. Komal Vijaywargiya¹, Dr. Apoorva Choudhary² and Dr. Aayushi Ruia³

1. M.B.B.S , M.S (Obs And Gyn).

- 2. M.B.B.S, D.N.B (General Surgery), Fiages Trained In Laparoscopy.
- 3. M.B.B.S., M.S (OBS AND GYN) Senior Resident AT P.C. Sethi Hospital, Indore.

..... Manuscript Info

Abstract

Manuscript History Received: 05 February 2021 Final Accepted: 10 March 2021 Published: April 2021

Kev words:-Spigelian Hernia, Total Laparoscopic Hysterectomy, Lipomatous, Subserosal Fibroid

..... A spigelian hernia is a type of ventral hernia where aponeurotic fascia pushes through a hole to create a bulge. It is the protuberance of omentum, adipose tissue or bowel in that weak space between rectus muscles and ventral abdominal obliques that ultimately pushes intestines or superficial fatty tissue through a hole creting a bulge.Spigelian hernias are rare as they are located not under abdominal layers of fat but between fascia interconnecting two muscles . We hereby present a case report on this rare hernia presenting as a bulge in left inguinal fossa of a 66 yr old woman scheduled for total laparoscopic hysterectomy and was repaired subsequently.

Copy Right, IJAR, 2021,. All rights reserved.

Introduction:-

A **Spigelian** is the type of ventral hernia where aponeurotic fascia pushes through a hole creating a bulge. It appears in the abdomen lower quadrant between an area of dense fibrous tissue and abdominal wall muscles causing a (Spigelian aponeurosis) .[1]

It is the protuberance of, omentum, adipose or bowel in that weak space between the stomach muscles, that ultimately pushes the intestines or superficial fatty tissue through a hole causing a defect. As a result, it creates the movement of an organ or a loop of intestine in the weakened body space that it is not supposed to be in. It is at this separation (aponeurosis) in the ventralabdominal region, that herniation most commonly occurs.

Spigelian hernias are rare compared to other types of hernias because they do not develop under abdominal layers of fat but between fascia tissue that connects to muscle. The Spigelian hernia is generally smaller in diameter, typically measuring 1-2 cm.^[3], and the risk of tissue becoming strangulated is high. We present a case of spigelian hernia in left inguinal fossa of a 66 yr old woman which was a coincidental finding during total laparoscopic hysterectomy, and thus was repaired subsequently .

Case Report-

A 66 yr old woman, P2L2, both normal vaginal deliveries, who had attained menopause 15 yrs back presented to us with chief complaints of lump in abdomen since one year, associated withpost menopausal bleeding since last one and a half months and pain in abdomen.

Corresponding Author:- Dr. Komal Vijaywargiya Address:-M.B.B.S. M.S (Obs And Gvn).

Consequently she was advised routine complete blood count, urine routine examination, pelvic and whole abdomen ultrasonography, MRI Contrast abdomen with pelvis, CEA and CA-125 levels. While her blood counts and urine examination were normal, her USG showed uterus of size approx. 8.7 * 4.8 * 4.5 cms, with cavity filled with heterogeneous echoes measuring 45 * 25 mms? polypoidal in nature. While her right adnexa was normal, she had 29 * 25 mms subserosal fibroid in left adnexa. She also had 38 * 16 mm sized mass in left mid abdominal region, ? lipomatous in nature.

MRI Contrast showed enlarged uterus of 8.3 * 5.9 * 3.9 cms with heterogeneously enhancing endometrial lesion requiring biopsy, with 2.2 * 1.3 * 1 cms intramural fibroid, and 2.7*1.5*1.9 cmssubserosal / broad ligament fibroid. Her endometrial biopsy was sent for histopathology which revealed complex hyperplasia with severe dysplasia. Her pap smear was normal. Upon obtaining a proper valid written consent and explaining entire procedure to her, she was scheduled for total laparoscopic hysterectomy. Intraoperatively her total hysterectomy with bilateral salpingo-oophorectomy was done, and then we encountered a circular 2*3 cm defect in spigelian aponeurosis placed in left iliac fossa, contents were evacuated, turned out to be omentum with fat, and then inlay mesh hernioplasty was carried out. Case stood procedure well and had an uneventful recovery.



Fig No. 1:- Laparoscopic View Showing Approx . 2*3 CM Aponeurotic Defect With Contents In Left Iliac Fossa .



Fig No .2:- Contents Of Spigelian Hernia Bieng Evacuated .



Fig No. 3:- Figure Depicting Spigelian Hernia With Omentum And Fat As Its Contents.



Fig No. 4:- Specimen Of Total Hysterectomy With Bilateral Salpingo- Oophorectomy.

Discussion:-

A Spigelian hernia, also known as a lateral ventral hernia, develops through the spigelian fascia, the muscles found in the abdominal wall whereas most other hernias develop just below layers of fat. Because of the location, swelling is often minimal with little outward signs of a hernia, allowing the condition to go undetected. ^[3] A spigelian hernia can cause significant damage if left untreated, causing obstruction of vital organs such as the bowels (small

and large intestine). This can result in cutting off blood supply to one or more of those organs, creating what is known as a strangulated hernia.^[2]

In 1764, almost a century later, the Flemish anatomist, Josef Klinkosch^[1] was acknowledged for recognizing and describing a hernia located in the Spigelian fascia, and coined the term Spigelian hernia.^[2]

Spigelian Hernias are exceptionally rare. It usually developing after age 50, primarily in men. The cause is usually a weakening of the abdominal wall, trauma, or prolonged physical stress. Spigelian hernias are sometimes challenging to diagnose or mistaken for other abdominal conditions.

Symptoms

- 1. Recurring pain in the area of the hernia followed by constant dull pain
- 2. Sudden decrease in the proper bowel function lasting over 24-48 hours
- 3. A small protrusion in the abdominal area, soft to the touch in people with little body fat .

Spigelian hernias are difficult to diagnosis.^[3] Clinical manifestations are not specific and are similar to acute small bowel obstruction. They include nausea, vomiting, abdominal pain, distended abdomen, and constipation. In most cases, a gangrenous bowel is present at the exploratory laparotomy .The Spigelian hernia can be repaired by either an open procedure or laproscopic surgery because of the high risk of strangulation ; surgery is straightforward, with only larger defects requiring a mesh prosthesis. In contrast to the laparoscopic intraperitoneal onlay mesh plan of action there is a significant higher risk associated with complications and recurrence rates during the period following a surgical operation.¹ A Spigelian hernia becomes immediately operative once the risk of incarceration is confirmed .

In our case the magnetic resonance imaging was targeted for uterus and adnexa ,MRI for anterior abdominal wall was not performed . While in clinical examination of patient , relating to her virgin abdomen and obese body , ? a small hernia , ? lipoma was suspected .

Conclusion:-

Spigelian hernias need high index of suspicion in all cases presenting with small bowel obstruction and classical radiological signs can guide towards its diagnosis. Even without risk factors such as previous abdominal surgery, trauma or peritoneal inflammation; the possibility of bowel obstruction secondary to the spigelian hernia should be considered.

Surgical treatment based on high clinical suspicion can reduce the risk of complications and postoperative mortality in patients with a spigelian hernia.

A Spigelian hernia becomes immediately operative once the risk of incarceration is confirmed. Today, a Spigelian hernia can be repaired by doing robotic laparoscopy and most patients can go home the same day. This novel uncomplicated approach to small Spigelian hernias combines the benefits of laparoscopic localization, reduction, and closure without the morbidity and cost associated with foreign material. Mesh-free laparoscopic suture repair is an uncomplicated approach to small Spigelian hernias combined with the benefits of a closure without the anguish and cost associated with foreign material.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

References:-

- 1. Skandalakis, PN; Zoras, O (2006-12-01). "Spigelian hernia: surgical anatomy, embryology, and technique of repair". The American Surgeon. 72 (1): 42–8.
- 2. Light, D; Chattopadhyay, D; Bawa, S (2013). "Radiological and clinical examination in the diagnosis of Spigelian hernias". Annals of the Royal College of Surgeons of England. **95** (2): 98–100.
- 3. Mhatre, Hemant Panditrao; Kanake, Vijay Bhaskarrao; Nandu, Vipul Versi (2016-12-14). "Spigelian hernia: a rare case presentation". International Surgery Journal. **2** (4): 717–720. doi:10.18203/2349-2902.isj20151112.