

## AB145. SOH22ABS068. Appendix within a spigelian hernia diagnosed on computer tomography

Reham Alkhalil<sup>1</sup>, Alexandra McCreery<sup>1</sup>,  
Nagabuthala Ramesh<sup>2</sup>, Amir Siddiqui<sup>1</sup>

<sup>1</sup>Surgical Department, Midland Regional Hospital, Offaly, Ireland;

<sup>2</sup>Radiology Department, Midland Regional Hospital, Offaly, Ireland

**Background:** Spigelian hernia was first described by Josef Kinkosh in 1764 after a Belgian anatomist, Adrian van der Spiegel, who had previously described the semilunar line. They account for 1–2% of all hernias and occur through slit-like defects in the anterior abdominal wall adjacent to the semilunar line. Approximately 90% are located in a 6 cm zone limited superiorly by the transumbilical plane and inferiorly by the interspinal plane. A particularly weak area is the intersection between the semilunar line and the arcuate line of Douglas. The majority of Spigelian hernia are intramural and remain deep to the external oblique aponeurosis. Usual hernial contents are omentum or small bowel. However large bowel, stomach, gallbladder, ovary, testis, bladder, a Meckel's diverticulum and leiomyoma of the uterus although have been described although rare.

**Methods:** Case presentation: an 86-year-old female presented to emergency department with severe paraumbilical pain, general fatigue and malaise. A tender lump was palpable in right iliac fossa with erythema of the over lying skin. These symptoms of pain and swelling have been intermittent for 15 years. Patient had no nausea or vomiting. On examination patient had a reducible hernia right para umbilical. Patients inflammatory markers were CRP: 7.6, WBC: 6.23, neutrophils: 4.9.

**Results:** She had a CT scan which showed several findings including a normal appendix in a Spigelian hernia.

**Conclusions:** Spigelian hernia can be subdivided into interstitial and subcutaneous with the former located below the major oblique aponeurosis while the latter crosses the major oblique aponeurosis as a consequence of rupture. Omentum, intestines, stomach, gallbladder, ovary/testis, uterus, bladder and appendix can potentially protrude into

the defect which correlates with varying degree of non-specific clinical presentations. To our knowledge, the incidence of appendix involved in SHs in the absence of inflammatory bowel disease are low with only 6 case reports identified, four cases of appendicitis and two ischaemic appendix. Ultrasonography (USS) and CT abdomen and pelvis are important for anatomical localisation and surgical planning and DG. Ultrasound has a sensitivity and positive predictive value (PPV) of 90% and 100% respectively. Limitations include operator dependence while diagnostic accuracy is reduced in obese patients. Alternatively, CT abdomen and pelvis demonstrates a sensitivity of 100% and PPV of 100%. Advantages include provision of additional information regarding different layers of abdominal wall and surrounding soft tissue changes.

**Keywords:** Hernia; Spigelian hernia; appendix within a spigelian hernia; computer tomography; abdominal mass

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### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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