
Port-Site Hernia Vs Spigelian Hernia: A Diagnostic Confusion

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Citation

F Akbar, M Tan, A Maw. *Port-Site Hernia Vs Spigelian Hernia: A Diagnostic Confusion*. The Internet Journal of Radiology. 2007 Volume 8 Number 2.

Abstract

Port site hernias are a recognized complication of laparoscopic surgery.

There is an increasing trend towards laparoscopic colorectal resection.

During such procedures a 10-12 mm port is often placed in the midclavicular line usually just below and lateral the level of umbilicus. If a port site hernia occurs through this site, it may be confused with a spigelian hernia which is a rare type of abdominal wall hernia.

A case is presented where such a port site hernia was confused with a spigelian hernia when reporting a computerized tomography scan. The aim of this report is to create awareness among the health professionals who may encounter this situation in future.

CASE REPORT

A 78 year old lady underwent a laparoscopic left hemicolectomy for a descending colon tumour. During this procedure a 12 mm Endopath® Xcel bladeless port was placed in right midclavicular line just below and to the right of umbilicus. This Xcel port claims to only split the muscle fibres and not cut them. Consequently, the fascial layers of abdominal wall were not closed at the end of procedures as the manufacturer recommends that this is not required when this type of port is placed in such a position (provided there is no reinsertion, enlargement or excessive manipulation of the port)₁.

Ten months later she noticed a painful lump on the right side of abdomen. On clinical examination the lump was lateral to the arcuate line just below the port site scar. A computerised tomography abdominal scan confirmed the diagnosis of an abdominal wall hernia.

The findings were reported as a small spigelian hernia. At operative repair it was found it to be an incisional port site hernia. The hernia was repaired using a sublay mesh. The patient made an uncomplicated recovery.

DISCUSSION

The adoption of laparoscopy has resulted in new procedure specific complications. Abdominal wall incisional hernias at the site of trocar placement are an important complication of

laparoscopy₂ because most trocar site hernias require surgery.₃ Accepted surgical practice is to close the deep fascial layers for midline laparoscopic ports. However, for laterally placed ports some recommend that closure of these fascial layers is not necessary₄.

A Spigelian hernia is an uncommon ventral hernia characterized by viscus protrusion via a defect in the linea semilunaris. As various locations are being used by the surgeons for inserting laparoscopic ports incisional hernias at the site of these ports or port site hernia is a variety of hernia which is being increasingly encountered.

Computerized tomography is an established imaging method for confirming or excluding suspected abdominal wall hernias. In addition CT can aid in the differential diagnosis of palpable abdominal wall masses and can help to define hernial contents such as fatty tissue, bowel, other organs, or fluid.

If inadequate or limited information is provided to the reporting radiologist such cases are more likely to be confused with rare types of hernias such as spigelian hernias. The aim of this article is to create a more awareness of this fact among health professionals.

We also recommend that when using any laparoscopic port greater than 5mm the abdominal fascial layer should be closed to minimize the risks of subsequently developing a

port site hernia.

References

1. <http://www.jnjgateway.com/home.jhtml?loc=USENG&page=viewContent&contentId=09008b988132b3d8&parentId=09008b988132b3d8> (access date 08-04-2008)
2. Callery MP, Strasberg SM, Soper NJ. Complications of laparoscopic general surgery. *Gastrointest Endosc Clin N Am.* 1996;6:423-444.
3. Azurin DJ, Go LS, Arroyo LR, Kirkland ML. Trocar site herniation following laparoscopic cholecystectomy and the significance of an incidental preexisting umbilical hernia. *Am Surg.* 1995;61:718-720.
4. Morrison CP, Wemyss-Holden SA, Iswariah H, Maddern GJ. Lateral laparoscopic port sites should all be closed: the incisional "spigelian" hernia. [Case Reports. Journal Article] *Surgical Endoscopy.* 16(9):1364, 2002 Sep

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