

42. Patient with Chronic Pelvic Pain

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Chief Complaint

Left groin pain and pelvic pain

History

The patient is a 41-year-old female with left groin and pelvic pain for 8 months. It first was felt when moving crates of files at work. The pain started in the left groin and radiates up to the umbilicus and around her back. She also has pain that radiates down her leg, mostly anterior thigh. The pain is currently 10/10 and ranges from 6/10 to 10/10. It is a pinching, “so sharp,” shooting pain that occurs daily. Any pressure on the area causes pain. This includes cuddling from her children, as she is also very sensitive in the area. She wears skirts and dresses to work, as formal pants and belts cause too much pain in the area. The pain is worse with prolonged standing, sitting, coughing, laughing, sneezing, climbing stairs, getting out of a car or bed, bending, and with crossing legs. Sexual intercourse is painful. The pain is worse during her menses and at the end of the day. She is best when lying flat. She has nausea when the pain is at its worst.

The pain is severe and activity limiting. She has been to the emergency room twice due to pain. She has been evaluated by her gynecologist as well as gastroenterologist and colorectal surgeon. Colonoscopy was normal. She was sent to a pain management specialist, as she was told she has muscle spasm. She underwent local injection, which increased her level of pain.

Physical Exam

The patient was in no discomfort. She has a healed Pfannenstiel incision from her prior Cesarean section. There is 3+ tenderness with associated fullness at the internal ring. There is no visible bulge or reducible mass. She has no hypesthesia and allodynia in the area.

Imaging

Pelvic ultrasound and abdominal ultrasounds were both nondiagnostic. CT scan showed a small left inguinal hernia with fat content.

Diagnosis

The patient has an occult inguinal hernia based on history and physical examination that are suggestive but not diagnostic of a hernia and then imaging which is diagnostic of a hernia. Her symptoms are not suggestive of a gynecologic or gastroenterologic disorder, as she has point tenderness at the internal ring and pain with activity that involves engaging the abdominal muscles.

Operative Treatment

The patient was offered open versus laparoscopic repair. There was a hint of possible femoral hernia on computed tomography (CT) scan, and so laparoscopic repair was considered the best option. Operative findings were of an indirect and femoral hernia. This was repaired with mesh, with fixation to Cooper's ligament, using TEP technique.

Postoperative Course

The patient had complete resolution of her pain as early as in the postoperative recovery unit. She was followed up for 2 years and has not had any recurrence of her symptoms.

Outcomes and Discussion

Occult inguinal hernias are more common among women but are often overlooked as a cause for pelvic pain, as inguinal hernias are considered a male disease. Symptoms are variable and may include pain radiating from the groin to the labia, vagina, down the leg, and around the back. The physical examination finding that is highly specific for such a hernia is point tenderness at the internal ring. In fact, early studies show this to be found in 98–100 % of all occult hernias, and ilioinguinal neuralgia symptoms were noted in 63 % (Tables 42.1 and 42.2) [1]. In our study, the finding of point tenderness at the internal ring meant inguinal hernia was between 13% and 25 % more likely to be the correct diagnosis in women with chronic pelvic pain, when correcting for BMI, age, dysmenorrhea, and radiating pain [2]. The overall positive predictive value of occult hernia when tenderness was elicited on groin examination was 74 %. The sensitivity was 60 % and specificity was 88 %. All other typical findings, such as a visible bulge, reducible mass, or palpable defect, are often not found.

Table 42.1. Preoperative symptoms in 192 cases of nonpalpable inguinal hernias (from Spangen and Smedberg [1], with kind permission from Springer Science+Business Media).

Type of inguinal pain	No.
Dull, gnawing pain	190
Neuralgic pain only	2
Combined dull and neuralgic pain	136
Pain, radiating from the groin to the ipsilateral	
Thigh	101
Flank	62
Lower abdomen	33
Pain accentuated by	
Physical exertion	176
Menstruation	19
Mental stress	3

Table 42.2. Clinical findings in 192 cases of occult inguinal hernia (from Spangen and Smedberg [1], with kind permission from Springer Science+Business Media).

Finding	No.
Tenderness corresponding to the deep inguinal ring upon palpation during a Valsalva maneuver	192
Hyperalgesia of the skin corresponding to the distribution of the ilioinguinal nerve	121

Imaging is often required to confirm the diagnosis prior to committing the patient to surgical exploration and repair. Ultrasound and magnetic resonance imaging (MRI) are found to be good options, and CT scan is considered to be a poor option for the pelvis. In our study, ultrasound has a 100 % positive predictive value and 0 % negative predictive value [3]. Thus, if an ultrasound is negative, and symptoms and physical examination are suggestive of inguinal hernia, then MRI (not CT scan) is recommended as the next modality [3, 4]. MRI has a 95 % positive predictive value and 85 % negative predictive value. MRI is 91 % sensitive and 92 % specific for findings of occult inguinal hernia. On the other hand, among patients who underwent CT scan with negative findings, 91 % had occult hernias notable on MRI.

On operative exploration, the patient has a fat-containing hernia defect. This is typically preperitoneal fat only, without peritoneal involvement, i.e., no hernia sac. Thus, intraperitoneal examination by laparoscopy, without takedown of the peritoneum and fat to visualize the fascia itself, may provide a false-negative result.

Conclusion

Inguinal hernia can cause chronic pelvic pain. The absence of a hernia on examination should not rule out inguinal hernia as the cause of pain. A complete history and physical examination, followed by imaging (ultrasound or MRI), are necessary to rule out inguinal hernia as the cause of pain. Surgical treatment may provide immediate cure.

References

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3. Miller J, Cho J, Michael MJ, Saouaf R, Towfigh S. Role of imaging in the diagnosis of occult hernias. *JAMA Surg*. 2014;149(10):1077–80.
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