INGUINAL FALLOPIAN TUBE HERNIA CAUSING CHRONIC LOWER ABDOMINAL AND PELVIC PAIN IN A REPRODUCTIVE AGED WOMAN

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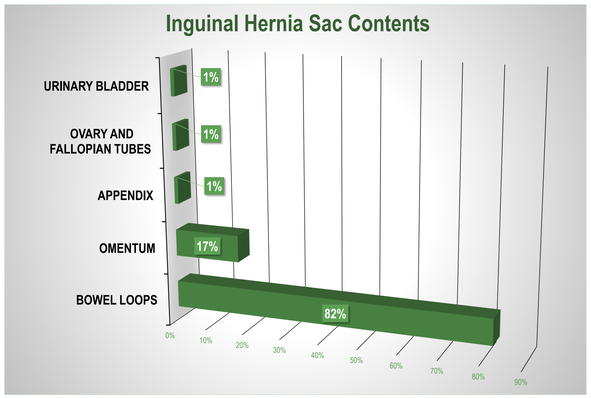
INTRODUCTION

- Inguinal hernias are particularly rare in adult females of reproductive age, with a male to female ratio of 20:1 [1, 2]. Among inguinal hernia cases, 1% are herniations of adnexa[3].
- Inguinal hernias that occur in female patients most commonly present in the perimenopausal or postmenopausal state, typically with acute presentation of pelvic and/or abdominal signs and symptoms [2-4].
- A variety of visceral organs may be present in a hernia, however, susceptible structures such as ovaries and fallopian tubes may uncommonly become entrapped and are at major risk of ischemia.
- To our knowledge, we present the first case of a 19-year-old female with an indirect inguinal fallopian tube hernia and the unusual chronic pain presentation of the case.
- To avoid infarction and prospective permanent fertility injury, inguinal hernias must be considered in the differential and ruled out as a diagnosis of exclusion in adult females of reproductive age presenting with either acute or chronic abdominal-pelvic pain as seen in our patient.



CASE REPORT

A 19-year-old G0P0 female presented to an OBGYN clinic for the evaluation of gradually worsening sharp pelvic pain in the left lower quadrant over a course of 2 years.

Pain worsened immediately prior to, during, and after menstruation. Temporary alleviation was possible with relaxation or laying supine; however, complete resolution was not possible. The pain was severe at times. Physical activity exacerbated her discomfort, creating difficult circumstances to maintain a schedule at work, school, and exercise. Associated symptoms included: constipation, diarrhea, dysuria, increased urinary frequency up to 10 times daily, in addition to an "inability to effusively empty the bladder".

There was no history of pelvic inflammatory disease, sexually transmitted diseases or dyspareunia. She reported being sexually active with one male partner and had been using oral contraceptive pills daily without difficulties. Occasional marijuana use up to 1-2 times a week was noted but denied tobacco, alcohol, or illicit drug usage. Patient denied experiencing fever, chills, nausea, vomiting, urgency, vaginal discharge, itching or burning. Her past surgical history included a laparoscopic repair of bilateral inguinal hernias at 2 months of age.

She remained symptomatic despite a thorough workup which included a trial with anti-inflammatories, steroid injections, an inconclusive MRI, a negative pelvic vaginal ultrasound, lab work, and uroflometry test. Pelvic Pain and Urinary Urgency Frequency (PUF) questionnaire resulted in a score of 21 points, indicating significant chronic pelvic pain symptoms [6]. Due to the increased likelihood of additional suspected pelvic pathology, the recommended course of diagnosis was to perform an exploratory laparoscopy.

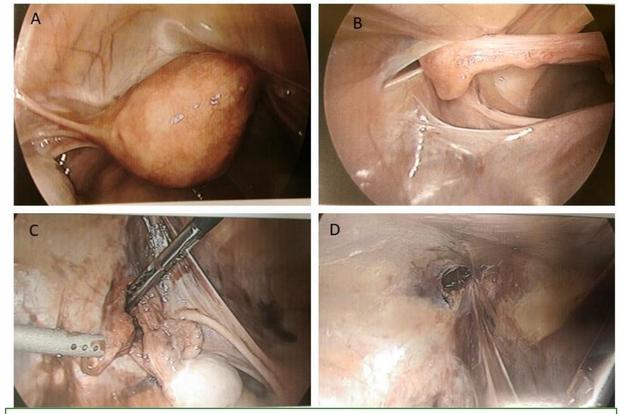


Fig 1: Laparoscopic Findings
(A) View of uterus in the pelvic cavity. (B) Pathologic left fallopian tube entrapped in the internal inguinal ring. (C) Left fallopian tube and ovary/adnexa after removal from the inguinal ring. (D) Appearance of the left inguinal ring post removal of fallopian tube.

LAPAROSCOPIC FINDINGS

- Several 1 mm vesicular lesions suggestive of active stage 1 endometriosis in the posterior cul-de-sac space and right uterosacral ligament
- Left fallopian tube was twisted and pulled up into the inguinal canal with the entire length of the fimbriated end within the canal.
- Another left lower quadrant transverse incision was made for a 5mm trocar. With the fallopian tube under tension, the Metzenbaum scissors were introduced into the inguinal canal and an attempt was made to tease out the fallopian tube from surrounding adherent structures. During this process, a peritoneal incision was made to gain greater exposure to this area being operated on, and because of the dense nature of adhesions between fallopian tube and inguinal ring, the process was rather difficult.
- Ultimately, the entire tube was released from the inguinal canal, in addition to fulguration of lesions, lysis of adnexal adhesions, and repair/release of the tubal inguinal hernia.

CONCLUSIONS

- The occurrence of a fallopian tube within an indirect inguinal hernia is a diagnosis of exclusion especially in females of reproductive age. It should be considered, however, in those with generalized chronic pelvic and/or abdominal pain with normal laboratory workup.
- Ultrasound, computed tomography, and MRI may be useful diagnostic tools.
- Due to potential incarceration and strangulation, prompt surgical intervention and medical management is of vital importance.

FUTURE RESEARCH

- A meta-analysis examining fertility in reproductive-aged females post inguinal female adnexa hernia repair may be explored with clinical studies in the future.
- Furthermore, there seems to be a need for additional research in the possible correlation between a positive childhood history of inguinal hernia repair as a risk factor for future female adnexa inguinal hernia.

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