Ovarian inguinal hernia after oocyte hyperstimulation in a 34-year-old female: A case report

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Introduction

- Inguinal hernia repairs are amongst one of the most performed surgeries in the United States (approximately 800,000 per year)
- Only 10% of inguinal hernias occur in females, most of which occur in neonates or infants, and they will rarely contain ovaries, fallopian tubes, or the uterus[2]
- Here, we describe a case of ovary-containing inguinal hernia after oocyte hyperstimulation with repair via the robotic approach

Figures

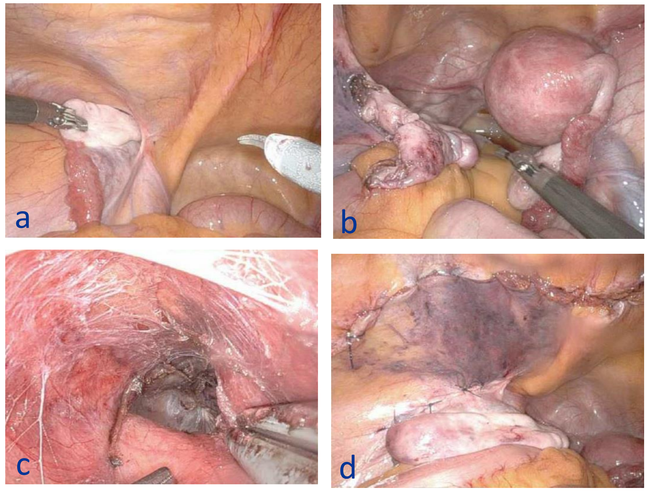


Figure 2: Intraoperative images demonstrating inguinal hernia sac containing ovary (a) with significant scarring (b). Post-reduction (c) and peritoneal flap closure and oophoropexy (d).

Case Report

- 34-year-old African American female, G0P0, referred for vulvar mass after oocyte stimulation
- History of palpable, freely mobile, and easily reducible mass in left mons since childhood
- Mass enlargement causing significant discomfort status-post oocyte stimulation with successful retrieval of eggs via left mons after confirmation with ultrasound
- Denies abdominal pain, difficulty with urination, or changes in bowel movements
- Access of abdominal cavity via Palmer's point and placement of three robotic trocars under direct visualization in right upper quadrant, upper midline, and Palmer's point
- Hernia sac retracted into abdominal cavity (Figure 2a)
- Significant scarring of ovary and hernia sac (Figure 2b) made dissection into inguinal ring difficult
- Reduction, adhesiolysis, and mobilization of hernia sac along with ovary and round ligament back into abdominal cavity achieved with blunt dissection and electrocautery (Figure 2c)
- Oophoropexy performed by gynecology team
- Synthetic mesh was used to close the hernia defect, and the peritoneal flap was closed (Figure 2d)
- Patient tolerated the procedure well, post-operative course was uneventful, and she discharged the following day; doing well at 2-week post-operative follow-up

Figures



Figure 1: A 34-year-old female with new-onset inguinal hernia after oocyte stimulation seen on computed tomography. Axial (a) and coronal (b) views of the inguinal hernia.

Discussion

- Inguinal hernias containing ovaries are extremely rare, particularly in females of reproductive age
- Exacerbation of inguinal hernia-related symptoms after oocyte stimulation has not been previous described
- Prior to in-vitro fertilization, patients are assessed for causes of infertility including hormonal and anatomical abnormalities, however, use of diagnostic laparoscopic remains debatable for evaluation of gynecological organs[3]
- Repair of initial, uncomplicated, unilateral inguinal hernias are traditionally recommended open or laparoscopic approaches[4]
- Robotic approach may offer improved visualization, retraction, and dexterity, and should be considered for hernias with suspected dense adhesions

Conclusion

- Ovarian inguinal hernias may be induced or have symptoms exacerbated by oocyte stimulation
- Open or laparoscopic repair of unilateral inguinal hernias are typically recommended
- This case highlights the benefits of the robotic approach for repair of unilateral inguinal hernias with significant scarring

References

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