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CASE REPORT

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Pantaloon hernia in a female

Nikhil Tayal, Hans Raj Ranga, Pranay Kumar Ahari, Meenu Beniwal, Vineet Kumar Mishra, Poonam Dhanda

ABSTRACT

Introduction: The word 'hernia' is derived from a Latin term meaning 'rupture'. Direct hernias are rare in females because of strong transverses abdominis muscle. Pantaloon hernia (combined direct and indirect) is even rarer. Case Report: A 42-year-old female presented to us with chief complaint of swelling in left groin. Intraoperatively, both direct and indirect sacs were found. Indirect sac was having omentum as content. Lichtenstein repair was done. Conclusion: All inguinal hernias in females occur as indirect protrusions. Because of the stress of childbearing, the transversalis fascia is stronger in the floor of the inguinal canal and hence has protective effect; so direct hernia in females is unusual. Pantaloon hernia is treated as any other inguinal hernia and options of open and laparoscopic repairs including TAPP (Trans-Abdominal Pre-Peritoneal Repair) and TEP (Total Extra-Peritoneal Repair) are available depending on the surgical expertise and other cost factors.

Keywords: Female, Hernia, Lichtenstein Repair, Pantaloon

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INTRODUCTION

The word 'hernia' is derived from a Latin term meaning 'rupture' [1]. Inguinal hernias are by far the most common type of hernias worldwide. Other common types of hernia are femoral hernia (6-17%), ventral hernia (3-8.5%) and obturator hernia (<1%). Incidence of inguinal hernia is more in males as compared to females with a male to female ratio of 6:1 [2]. The incidence of inguinal hernia correlates to the congenital weakness of internal ring [3]. Etiology of inguinal hernia is straining, lifting of heavy weights, chronic coughing, constipation and appendicectomy by mcburney's incision for right-sided hernia [1]. High sports activity is protective in inguinal hernia [3]. Direct hernias are rare in females because of strong transversusabdominis muscle. Pantaloon hernia (combined direct and indirect) is even rarer with a reported incidence of 1.6% [4]. We present a case of 42 years female that was planned for left sided indirect hernia and turned out to be a pantaloons hernia instead.

CASE REPORT

A 42-year-old female presented to us with chief complaint of swelling in left groin from two years. Swelling was insidious in onset, gradually progressive, size increased on standing and straining and reduced on lying down. There was no history of chronic cough, chronic constipation, diabetes mellitus or hypertension.

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There was a history of tubectomy 15 years back under spinal anaesthesia. On examination, BMI of patient was 23.7, Pulse rate – 82/min, Blood pressure – 110/72 mm of Hg. On local examination, a globular swelling of 3x4 cm was present in left inguinal region, which was reducible, cough impulse was present and on three-finger test it was diagnosed to be an indirect hernia. Her hemoglobin was 11.9 g/dL; Blood urea was 30mg/dL; Blood sugar – 85 mg/dL; serum sodium – 149 mEq/dL and serum potassium – 4.1 mEq/dL. Her ECG showed pulsus quadrigeminus for which oral metoprolol was started 15 days prior to surgery. She was admitted to surgery ward one day before surgery, kept nil per oral over night and pre medication was given. Intraoperatively, both indirect (Figure 1) and direct sacs (Figure 2 and 3) were found.



Figure 1: Indirect sac.



Figure 2: Direct sac.



Figure 3: Indirect and direct sac.

Indirect sac was having omentum as content, which was reduced and herniotomy was done. Lichtenstein repair was done. Patient was shifted to surgical ward postoperatively and was discharged on the following day under stable condition.

DISCUSSION

All inguinal hernias in females occur as indirect protrusions [1]. In 1973, Glassow reported that direct inguinal hernias in women are "so rare that a primary inguinal hernia is considered to be indirect until proven otherwise" [5, 6]. Protective effects of sports activity in females can be explained by optimizing the resistance of the abdominal musculature protecting the relatively small inguinal weak point [7]. Because of the stress of childbearing, the transversalis fascia is stronger in the floor of the inguinal canal and hence has protective effect; so direct hernia in females is unusual [3, 8]. The rarity of direct and hence, pantaloon hernia in women can be explained by the anatomical differences in the inguinal canal and abdominal wall between males and females. Pantaloon hernia is treated as any other inguinal hernia and options of open and laparoscopic repairs including TAPP and TEP are available depending on the surgical expertise and cost factors [5].

CONCLUSION

Direct inguinal hernias do occur in women albeit very rarely while pantaloon hernias are extremely rare. Nevertheless, the treatment of all inguinal hernias in females should be done surgically to avoid complications such as strangulation as indirect inguinal hernia are common in females and are more prone to strangulation.



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REFERENCES

- 1. Kappikeri VS, Thalasta P. Clinical study of hernia in females. Int Surg J 2017;4(5):1632–6.
- 2. Read RC, White HJ. Inguinal herniation 1777–1977. Am J Surg 1978;136(6):651–4.
- 3. Chawla S. Inguinal hernia in Females. Med J Armed forces India 2001;57(4):306–8.
- Choudhary R, Pon Rachel V, Gaikwad P. Pantaloons hernia in female: A straddling rarity. AJCRS 2018;1(2):1–5.
- Glassow F. An evaluation of the strength of the posterior wall of the inguinal canal in women. Br J Surg 1973;60(5):342-4.
- 6. Kark AE, Kurzer M. Groin hernias in women. Hernia 2008;12(3):267–70.
- Kaplan SA, Synder WH Jr, Little S. Inguinal hernia in females and testicular feminization syndrome. Am J Dis Child 1969;117(2):243–51.
- 8. Gnidec AA, Marshall DG. Incarcerated direct inguinal hernia containing uterus, both ovaries, and fallopian tubes. J Paediatric Surg 1986;21(11):986.

Author Contributions

Nikhil Tayal – Conception of the work, Design of the work, Acquisition of data, Drafting the work, Final approval of the version to be published, Agree to be 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

Hans Raj Ranga – Conception of the work, Analysis of data, Interpretation of data, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be 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

Pranay Kumar Ahari – Conception of the work, Design of the work, Acquisition of data, Drafting the work, Final approval of the version to be published, Agree to be 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 Meenu Beniwal – Interpretation of data, Drafting the work, Final approval of the version to be published, Agree to be 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

Vineet Kumar Mishra – Conception of the work, Design of the work, Drafting the work, Final approval of the version to be published, Agree to be 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

Poonam Dhanda – Conception of the work, Design of the work, Acquisition of data, Drafting the work, Final approval of the version to be published, Agree to be 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

Guarantor of Submission

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Consent Statement

Written informed consent was obtained from the patient for publication of this article.

Conflict of Interest

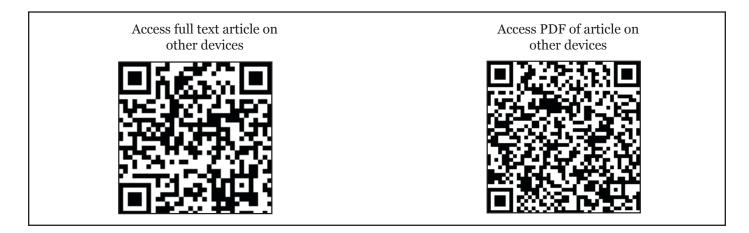
Authors declare no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.

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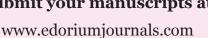


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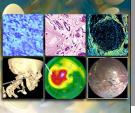








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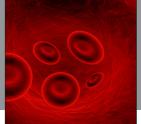




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