

Pantaloon Hernia in an Elderly Female: A Rare Experience for a Surgeon

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Abstract: *Hernia is defined as an abnormal out pouching of a viscera or tissue through a defect in its surrounding walls. Though hernia can occur anywhere in the body, the most common is Inguinal Hernia, with a higher predisposition towards male gender. Pantaloon hernia is a rare entity and is a combination of two adjacent hernial sacs. This report includes a 77 year old female who was diagnosed, intra operatively, with Pantaloon Hernia. She underwent Lichtenstein Hernioplasty for the same, under spinal anesthesia.*

Keywords: hernia, inguinal hernia, pantaloon hernia, female hernia

1. Introduction

Abdominal wall hernia is a common surgical entity, with a prevalence of 1.7% for all ages and 4% for those aged over 45 years [1]. Inguinal hernias is the most common hernia irrespective of gender followed by umbilical, epigastric and femoral hernias [2]. Inguinal hernia in females is rare as compared to males with 1 male in 5 and 1 female in 50 developing inguinal hernia in lifetime with incidence of inguinal hernia in females being 1.9% [3].

Direct hernias are very rare in females due to multiple physiological and anatomical variations as compared to males with reported incidence of 3% to 14%, respectively [4]. The occurrence of Pantaloon hernia where both the direct and indirect hernias exist at the same side is very rare [4]. The incidence of pantaloon hernia in women being 1.6% as compared to 5% in men [3]. Here, we present a case of a 77 year old female who was initially diagnosed with right sided indirect inguinal hernia and turned out to be a pantaloon hernia, intraoperatively.

2. Case Presentation

A 77 year old female presented to Surgery OPD with complaints of swelling and dragging pain over her right lower

abdomen for last two months and the swelling was gradually increasing in size. The swelling gets prominent on standing and straining and gets relieved on laying down. No significant predisposing history like chronic cough, constipation, smoking or prior abdominal surgeries.

On examination, she was found to have Right sided Indirect Inguinal Hernia, with a positive cough impulse [Figure 1]. She was admitted and investigated for her complaints. Her vitals were stable (PR- 78/Bpm, BP: 118/72 mmHg, Spo2: 97% at room air) with a BMI of 29.1. Hematological parameters, ECG and Chest X-Ray were normal. Ultrasound whole abdomen was done which was suggestive of Right Inguinal Hernia with bowel and omentum as content [Figure 2].

She was taken up for surgery under Spinal anesthesia, after a pre-anesthetic checkup. Intra-operatively, she was diagnosed with Pantaloon Hernia of Right side (Both Direct and Indirect) [Figure 3]. She underwent surgery which involved repairing of posterior wall followed by Lichtenstein Hernioplasty [Figure 4]. Post operative period remained uneventful. She was discharged on third post operative day on oral analgesia. She was followed up on seventh post operative day and on tenth post operative day sutures were removed.

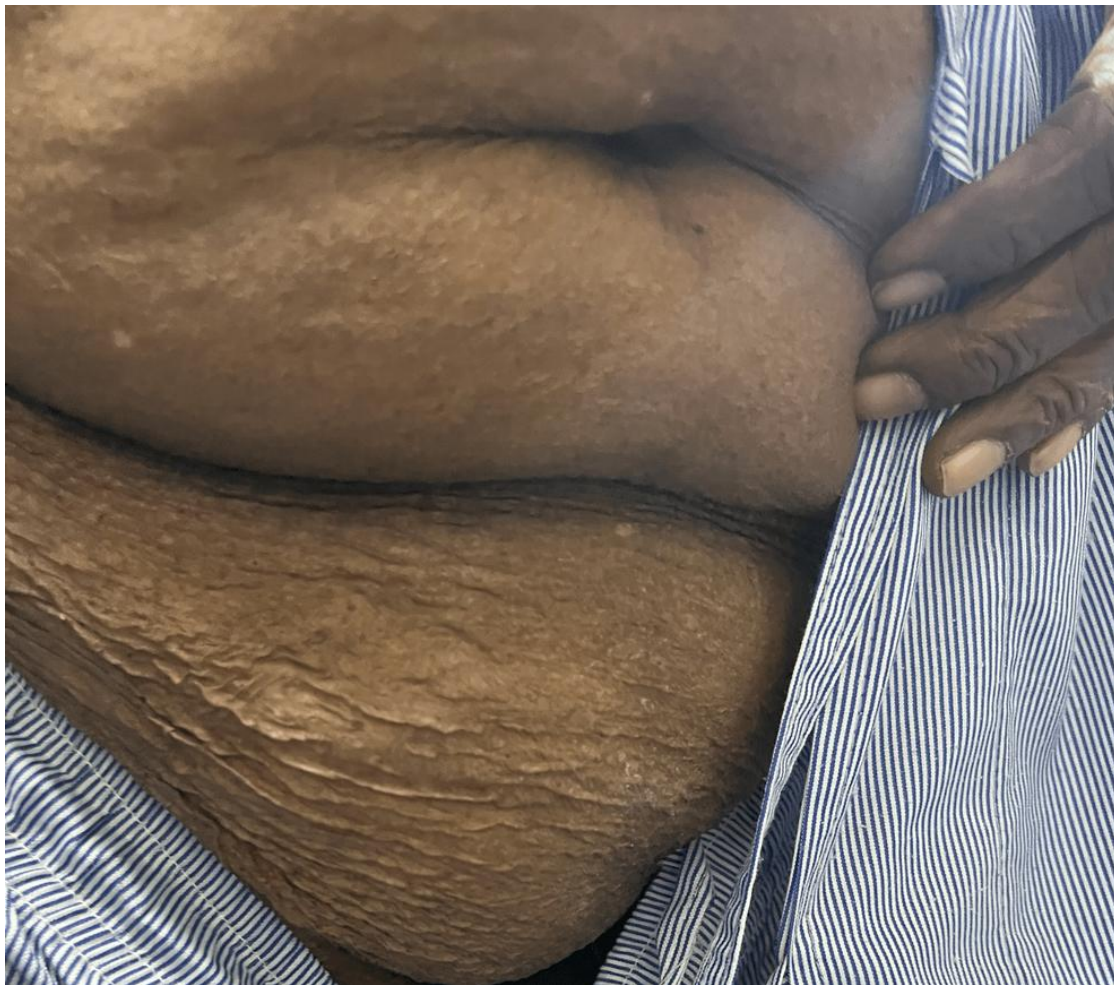
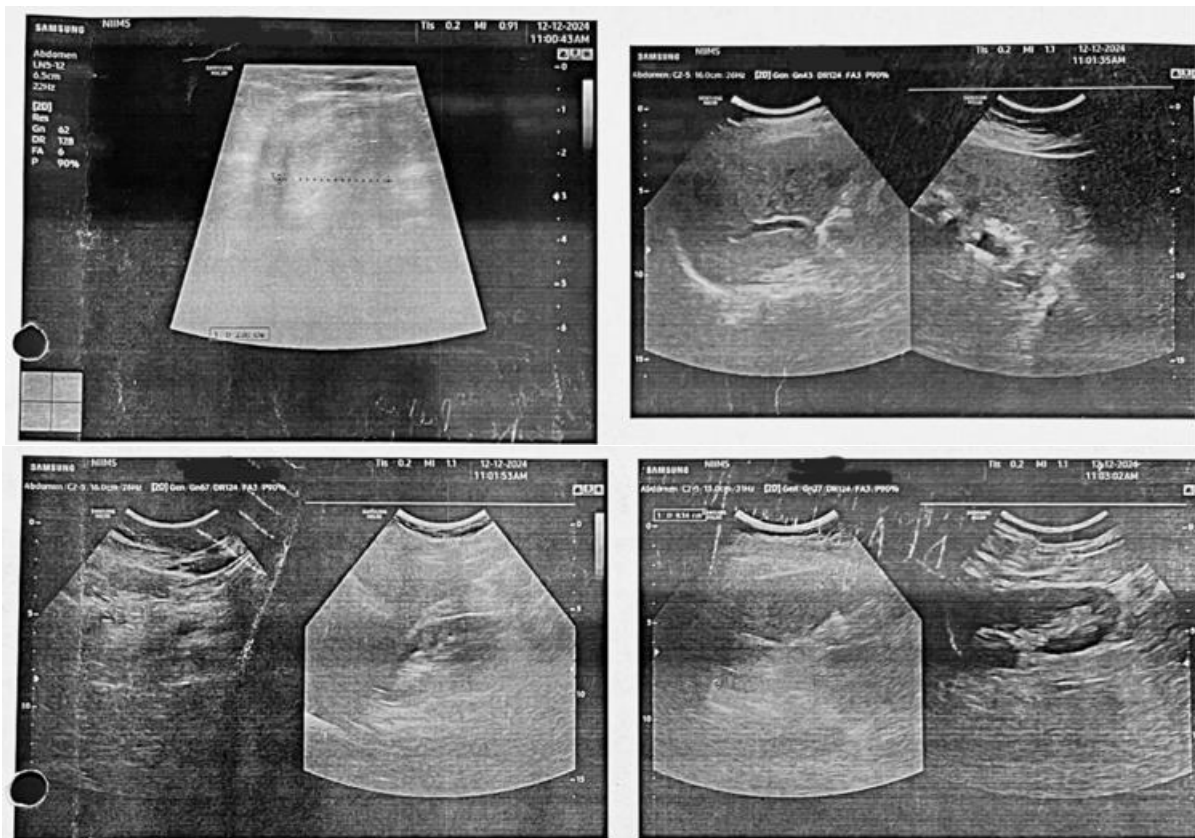


Figure 1: Pre-operative picture showing right sided Inguinal Hernia



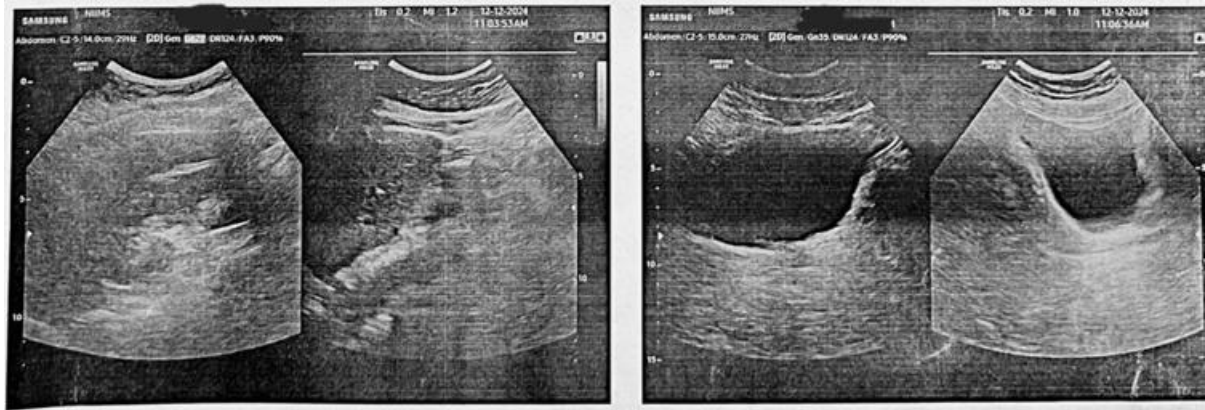


Figure 2: Ultrasound Whole Abdomen Report (The dotted area in the first image showing protruding content through hernial defect)



Figure 3: Intraoperative picture showing Indirect and Direct sac (Pantaloons Hernia)



Figure 4: Prolene Mesh placed to strengthen the Posterior wall

3. Discussion

Historically, Gabrielle Falloppio in 1562, described the inguinal ligament and established the landmark as an integral component of groin hernia repair [5]. Hesselbach, in 1816, described the triangle, further clarifying the anatomy used to distinguish various hernias. The term “groin hernia” refers to indirect inguinal, direct inguinal, and femoral hernias and the relationship to the inguinal ligament and inferior epigastric vessels defines them [6].

Risk Factors: Well-established risk factors include male sex, increased age, and genetic predisposition among others [7].

The risk increases with age with a bimodal spike one in less than 5 years of age and men greater than 75 years of age [7]. Having a first degree relative with an inguinal hernia increases the risk of developing a hernia [8]. Other factors include smoking, chronic obstructive pulmonary disease, lower body mass index, high intrabdominal pressure, patent processus vaginalis and history of open appendectomy [9].

Inguinal hernias in females occur, mostly, as indirect hernias [10]. In female, the transversalis fascia is stronger near the floor of the inguinal canal, so direct hernia in females is unusual [11]. Hence, occurrence of Pantaloon hernia is rarest in females. Management in all cases remain Hernioplasty.

Volume 14 Issue 1, January 2025

Fully Refereed | Open Access | Double Blind Peer Reviewed Journal

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Tayal N et al. cited one such case, where a 42-year-old female was diagnosed, intra-operatively, with Pantaloon Hernia [12]. Otuu O et al. published a case of 60-year-old female, who was diagnosed with Pantaloon hernia, intraoperatively [13]. Due to its rare occurrence, reported cases of female Pantaloon Hernia remain rare. Moreover, since they are mostly diagnosed during surgery, it poses a surgical dilemma in terms of repair and management of complexities.

4. Conclusions

Hernia surgery remains one of the most commonly performed surgeries. Due to its anatomical variations and reconstructions involving the fascial planes, repairing a hernia, sometimes, becomes a daunting task. It gets more difficult when more than one variety co exists. Inguinal Hernia is the most common form of hernia that a surgeon encounters. It could be congenital or acquired. Though it can occur in both the genders, inguinal hernia in female is, comparatively, rarer. Pantaloon Hernia in itself is rare, where both Direct and Indirect hernia exist on the same side and often missed clinically. In female, Pantaloon Hernia is very rare due to anatomical differences. The approach to such complexity remains timely identification during surgery and subsequent surgical repair. This case identifies one such incident where a elderly female was diagnosed, initially, with Indirect inguinal hernia and intra-operatively she was found to have a Pantaloon Hernia.

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