Case Report

A Case Report on A Very Rare Hernia : Primary Anterior Perineal Hernia

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Introduction : The entity of primary Anterior Perineal Hernia (APH) is very rare and almost exclusive to female gender. The contributing factors are chronic constipation, prolonged and difficult labour, atrophy of Levator Ani muscle and disease of Pudendal Nerve. This study presents a successfully treated case of primary anterior perineal hernia. Till date reported cases in literature so far are less than 50.

Case presentation : A 32-year-old female presented with a hanging soft Globular Swelling in the right anterior perineal region. High resolution USG and MDCT (lower abdomen with pelvis) diagnosed this to be a primary APH with omentum as its content. Patient was successfully treated with mesh by combined open abdomino-perineal approach.

Discussion : Literature shows many treatment approaches, like open or Laparoscopic mesh repair by perineal, abdominal and combined approaches. Our case confirms that Mesh repair by combined open abdominoperineal approach is also feasible and successful in case of a large irreducible hanging APH.

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Key words **: Perineal hernia, Mesh repair, Anterior perineal hernia.**

Case Report

A 32-year-old female presented with chief complaint of a Swelling hanging on the medial aspect of right thigh with dragging sensation without any chronic constipation. She also had para vulvar protrusion. The hanging Mass in the perineal region protrudes through urogenital triangle anterior to the transversus perinei muscle, measured about 10 cm in size and was globular in shape. Patient had a history of one assisted vaginal delivery but had not undergone any Perineal Surgery. On examination, a smooth globular hanging swelling 10 cm in diameter with a stalk was observed in the anterior region of perineum originating from the urogenital triangle. The Swelling was non tender, soft in consistency, compressible, non-reducible, non-pulsatile with palpable cough impulse. There were no signs of strangulation. Transillumination was negative. Bimanual, per-vaginal, and per-rectal examination excludes cystocele or rectocele. HRUSG showed tissue lesion deep to anterior part of right side of perineum. MDCT showed herniation through a defect of 2 cm in size, containing omentum and fat, protruding through a gap in urogenital diaphragm anterior to transversus perinei muscle. Coronal sections showed the Hernia measuring 10cm x 9cm.

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Editor's Comment :

- A case report on very rare primary Anterior Perineal Hernia, successfully treated with combined abdominoperineal approach using prolene Mesh repair in a female patient.

Management and Outcome — The patient was positioned in the Lloyd Davis position under General Anesthesia. Sub umbilical midline incision was made. Content was passing anterior to broad ligament and lateral to bladder. Entire omentum and sac could not be reduced by abdominal manipulation as the sac was very large with omental adhesions. So, we had to approach perineally with a longitudinal incision and redundant sac with omental adhesions was excised. Defect of around 2 cm in the urogenital diaphragm was identified and closed with Vicryl 2-0 and Polypropylene Mesh was used for repair in anterior compartment of perineum and secured anteriorly to Inferior Iliopubic Rami and pelvic floor, medially to lateral vaginal wall, posterolaterally to transversus perinei, posteriorly to the perineal body and laterally to ileococcygeus with Prolene 2-0 suture. Intra-abdominally peritoneum apposition was done with few stitches. Closure of abdominal wall and skin concludes the Surgery with placement of closed suction drain in the perineum. Drain was removed on 3rd postoperative day and patient was discharged after fifth postoperative day.

Discussion

Perineal Hernia is a rare entity, among them primary APH is way rarer, less than 50 cases accounted till date. First reported case was done by Scarpa[8] in 1821 however, this entity was mentioned first by De Garengeot[8] in 1731.

In 1936 first reported case is noted by Kondo in 26-year-old female, in which abdominal approach is done to repair perineal hernia. Similarly, Amos, Richard and Ruben, Sato *et al*, Vincent *et al*, Rebecca *et al*, Ito *et al*, Kuruki, Amano, Preiss *et al*, Dirk *et al*, Washiro et al, Jorge and Juan also repair the perineal Hernia through abdominal approach through consecutive years[2].

Total 29 cases were reported till now where primary perineal Hernia is reported and repair is done with either abdominal approach and abdominoperineal approach, by open or laparoscopic method[2].

Kondo, Amos, Richard and Ruben, Sato *et al*, Vincent *et al*, Amano, Preiss *et al* done the repair with sutures[2].

Many authors done the repair with suture and Mesh both whereas many authors done the repair with only Mesh.

Our case is number 30 in the published literature and we approach through combined abdomino-perineal approach and repair is done with suture and mesh both.

Primary perineal Hernias are focal, acquired defects within the pelvic floor that typically occur in women because of pelvic attenuation associated with vaginal delivery or chronic conditions involving increased abdominal pressure (eg, Chronic Cough, Constipation, Ascites). Congenitally deep elongated pouch of Douglas is a contributing factor in females[1,2]. Secondary perineal Hernias are Hernias within the pelvic floor that result from prior Perineal Surgery like abdominoperineal resections. Other factors may be Obesity, ascites and Pelvic Infections. Our case is a primary one with history of assisted vaginal delivery being the possible contributing factor[3].

Herniation can be through the anterior or posterior compartments of the pelvic floor. Anterior perineal Hernias occur exclusively in women; no confirmed cases in men have been reported till now[4]. Anterior Perineal Hernias occur through the urogenital diaphragm within the triangular regions lateral to each side of the vaginal vestibule, bounded laterally by Ilio- coccygeus muscle, medially by Bulbo-Cavernosus muscle and posteriorly by transversus perinei muscle. Our case is an anterior type as diagnosed by imaging and confirmed during surgical exploration. Posterior Perineal Hernias occur posterior to the transversus perinei muscles and anterior to the ventral borders of the Gluteus Maximus muscles. They typically occur midway between the anus and the Ischial Tuberosity within a levator ani defect, in the space between the Pubo-Coccygeus and Ischio-Coccygeus portions of the levator ani muscle.

The Hernial sac of a perineal Hernia may contain one or more of the Abdomino-Pelvic viscera like small or large Bowel, Bladder, Omentum, Ovary and fallopian tube[7], in our case the content was omentum.

Treatment modality is Surgery and in literature there are three approaches: Abdominal, Perineal and Combined. Among them Abdominal approach being the preferred one because of better delineation of Hernia sac and more secure repair[5,6]. Perineal approach is a direct one but with lesser exposure being its drawback.

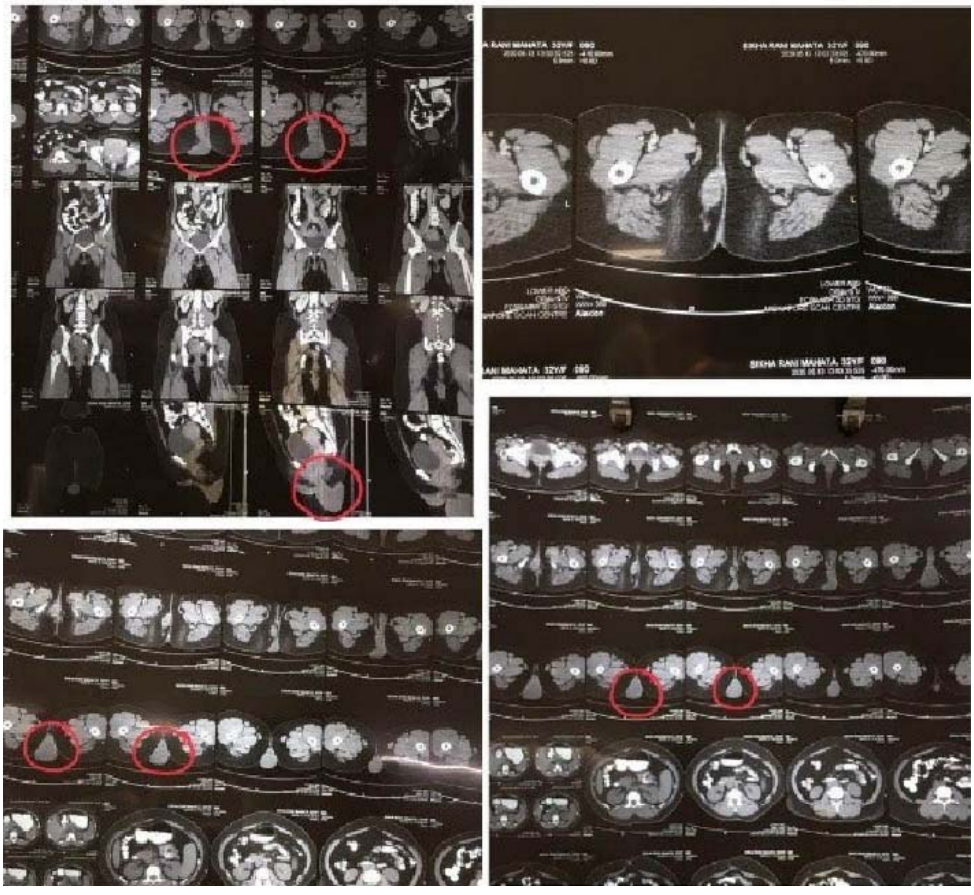

Fig 1 — MDCT showing primary anterior perineal hernia (encircled)

In extreme cases, where contents cannot be reduced, combined approach is used for Surgery. As in our case fat contents could not be reduced and Perineal Swelling protruding through the defect, though we started with abdominal approach but perineal dissection of sac had become compulsory. Because of atrophied muscle suture repair has been associated with high recurrence rates and Mesh fixation is usually required. In this case we used a polypropylene Mesh which has been practiced by most Surgeons in the available literature.

Follow up has been done for one year which is uneventful.

Radiology and Operative Photograph (Figs 1&2) :

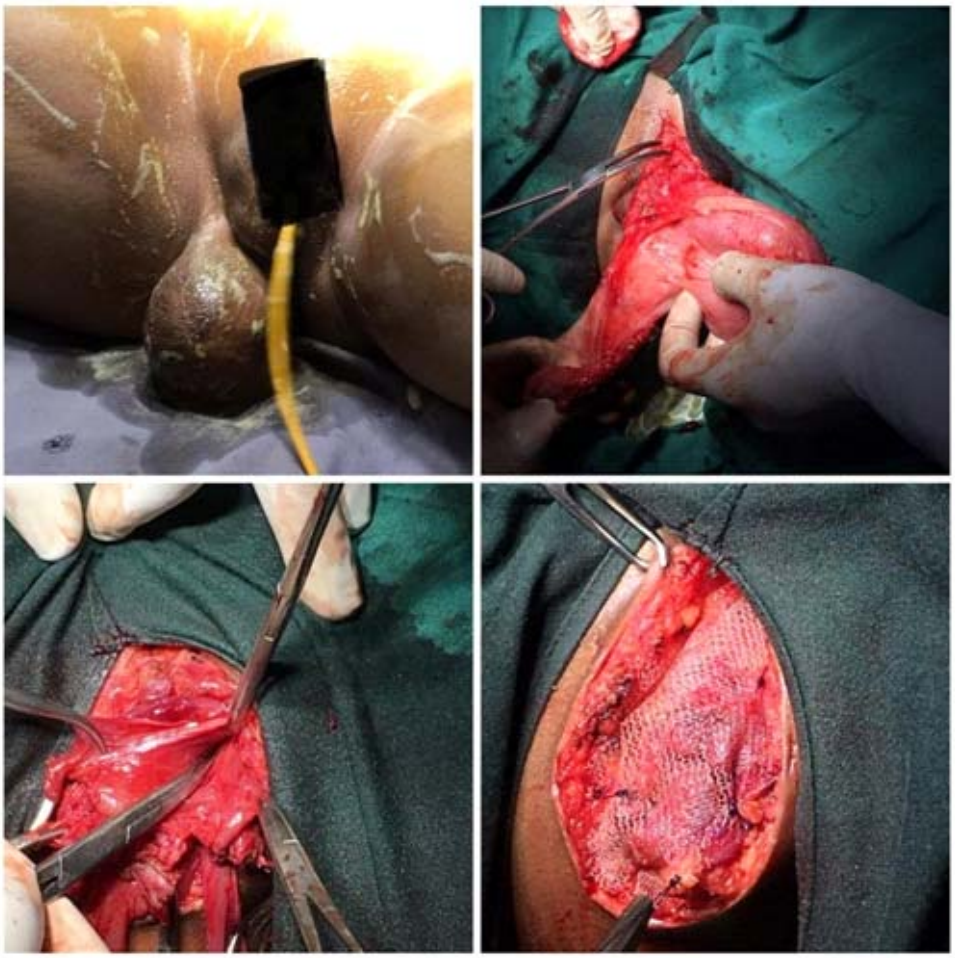

Fig 2 — Pre-operative and postoperative photographs.

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