



## PARADUODENAL [INTERNAL] HERNIA

**Dr. Susmitha Gade** Resident, Department of General Surgery

**Dr. Harsh Sheth** Resident, Department of General Surgery

**Dr. Pratik Shaparia** Associate Professor, Department of General Surgery

**ABSTRACT** Paraduodenal Hernia [PDH] is the most common type of internal hernia, accounting for over 50% [1] of reported cases. Despite its prevalence among internal hernias, it remains a rare and often underdiagnosed cause of small bowel obstruction due to its nonspecific symptoms and intermittent presentation.

**KEYWORDS :** Paraduodenal Hernia, Small Bowel Obstruction.

## INTRODUCTION

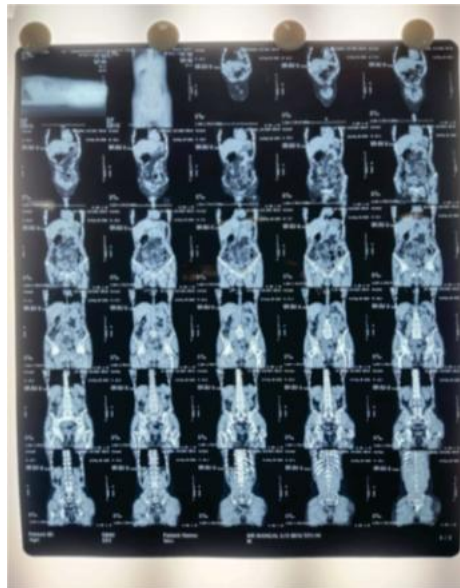
Paraduodenal hernias are congenital in origin and result from malrotation of midgut and fixation during embryologic development, leading to the formation of peritoneal fossae into which the small bowel can herniate. PDH represent the most common type of internal hernia. Left sided PDH, are more common [2] than right sided, involves herniation of small bowel loops into the fossa of Landzert, located to the left of the fourth part of the duodenum, posterior to the inferior mesenteric vein and left colic artery. In contrast, right sided PDH occurs through the fossa of Waldeyer, behind the superior mesenteric vessels, and are generally more difficult to diagnose and treat due to the deeper location and proximity to vital vascular structures.

## Case Details

A 53 year old male patient with abdominal pain for 8 days. This was associated with vomiting, loss of appetite, difficulty in passing stools. He was vitally unstable at presentation [ Temp: Afebrile, PR : 108/min, RR : 24/ min, BP : 90/60 mmHg, SPO2 : 96% @ RA]. Resuscitation was done with RL @ 80cc/hr and patient was kept on 2lt of O2. Meanwhile blood was drawn from patient for investigations and appropriate investigations like USG abdomen and pelvis , CECT abdomen were done [Diagram 2]. USG shows visualized bowel loops shows to and fro peristalsis in right iliac fossa region, left iliac fossa region, right lumbar and left lumbar regions [Diagram 1]. Once the patient was vitally stable, he was taken for Exploratory Laparotomy which revealed INTERNAL PARA DUODENAL HERNIA with DUODENAL BOWEL GANGRENE [between third to fourth part]. Resection and Anastomosis was done and 2abdominal drains were placed at right and left lumbar regions respectively [Diagram 3]. Patient was shifted to ward in a stable condition and was discharged on post operative day 9 on full oral feeds.



Patients typically present with intermittent abdominal pain, nausea, vomiting, or signs of bowel obstruction. Despite this, they remain a rare clinical entity overall and are often misdiagnosed due to their nonspecific symptoms and intermittent clinical course. Contrast enhanced CT is the imaging modality of choice, revealing clustered loops of surrounding structures in an abnormal location [typically left upper quadrant for left PDH], signs of encapsulation, and displacement of mesenteric vessels. Delayed diagnosis increases the risk of strangulation, ischemia, and bowel necrosis.



Surgical intervention, either open or laparoscopic, is the definitive treatment. The procedure involves the reduction of herniated bowel, careful dissection to avoid injury to adjacent vessels, and closure or widening of herniated defect to prevent recurrence. The laparoscopic approach offers the advantages of reduced postoperative pain, shorter hospital stay, and quicker recovery, and is increasingly favoured in centres with appropriate expertise. Early diagnosis and timely surgical management are critical in preventing serious complications and ensuring favourable outcomes.



## CONCLUSION

Paraduodenal hernias are rare, they should be considered in the differential diagnosis of unexplained abdominal pain or intestinal obstruction, especially in patients without prior abdominal surgery. Advancements in imaging techniques and minimally invasive surgical approaches have improved diagnostic accuracy and patient outcomes. Early recognition and timely surgical intervention and paramount to

prevent complications and ensure favourable prognosis

## REFERENCES

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