

**GIANT PEDUNCULATED PELVIC ILEAL DUPLICATION CYST MIMICKING  
RECTAL DUPLICATION: A CASE REPORT****K. N. Rattan<sup>1</sup>, Shruti Bansal\*<sup>2</sup>, Manpreet Tanwar<sup>2</sup>, Arpita Varshney<sup>3</sup> and Priya Jain<sup>2</sup>**<sup>1</sup>Senior Professor & Head, Department of Paediatric Surgery.<sup>2</sup>Resident, Department of Pathology.<sup>3</sup>Resident, Department of Radiodiagnosis.

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**ABSTRACT**

Massive alimentary tract duplications are uncommon congenital malformations that can pose diagnostic difficulties particularly if located deep in pelvis. We herein report a case of giant pedunculated ileal duplication cyst in a six year old male child. The cystic lesion was located in the pelvic region and mimicked rectal duplication preoperatively. The case was managed successfully by surgery and is doing well in follow up.

**KEYWORDS:** Giant, ileal, duplication, pelvic.**INTRODUCTION**

Enteric duplication cysts are rare congenital anomalies occurring in one out of 25000 deliveries.<sup>[1]</sup> They can develop anywhere along the digestive tract, arising from the mesenteric side and can be single or multiple, communicating or non communicating, saccular or tubular but pedunculated non communicating giant cyst is very rare. Most duplications become symptomatic during infancy, although some occasionally manifest in older patients.<sup>[2]</sup> The most commonly involved region is small intestine, with the order from most to least common being the ileum, jejunum and duodenum. Giant cystic duplications of the small bowel, however, are very rarely encountered.<sup>[3]</sup>

We are reporting a case of huge cystic duplication of ileum in a six year old male child. The cyst was pedunculated, non communicating and mimicked rectal duplication owing to its pelvic location.

**CASE REPORT**

A six year old male child was brought to the Accident and Emergency Department with complaints of abdominal pain, distension, bilious vomiting and constipation. On examination, the child was dehydrated, abdomen was tender and distended with visible peristalsis. The child was kept NPO. Nasogastric aspiration was done, intravenous fluids and antibiotics were given. The dehydration and electrolyte imbalance was corrected.

The child was investigated and an X ray abdomen showed multiple air fluid levels suggestive of intestinal

obstruction. Ultrasonography abdomen revealed a cystic lesion in pelvis with dilated gut. Contrast enhanced CT showed a well defined cystic lesion with thick enhancing wall in recto sigmoid region (Figure 1). A diagnosis of duplication cyst rectosigmoid region was made. After adequate resuscitation, the child was taken up for emergency exploratory laparotomy. On exploration, a huge cyst measuring approximately 15×15 cms was visualised in pelvis adherent to surrounding structures. The cyst was mobilized and was found to be in communication with mid ileum by pedicle, however, not communicating with lumen of gut. Surgical excision of cyst was done and the resected specimen was sent for histopathological examination which revealed histological features of ileal duplication cyst. Post operative period was uneventful.

## LEGENDS

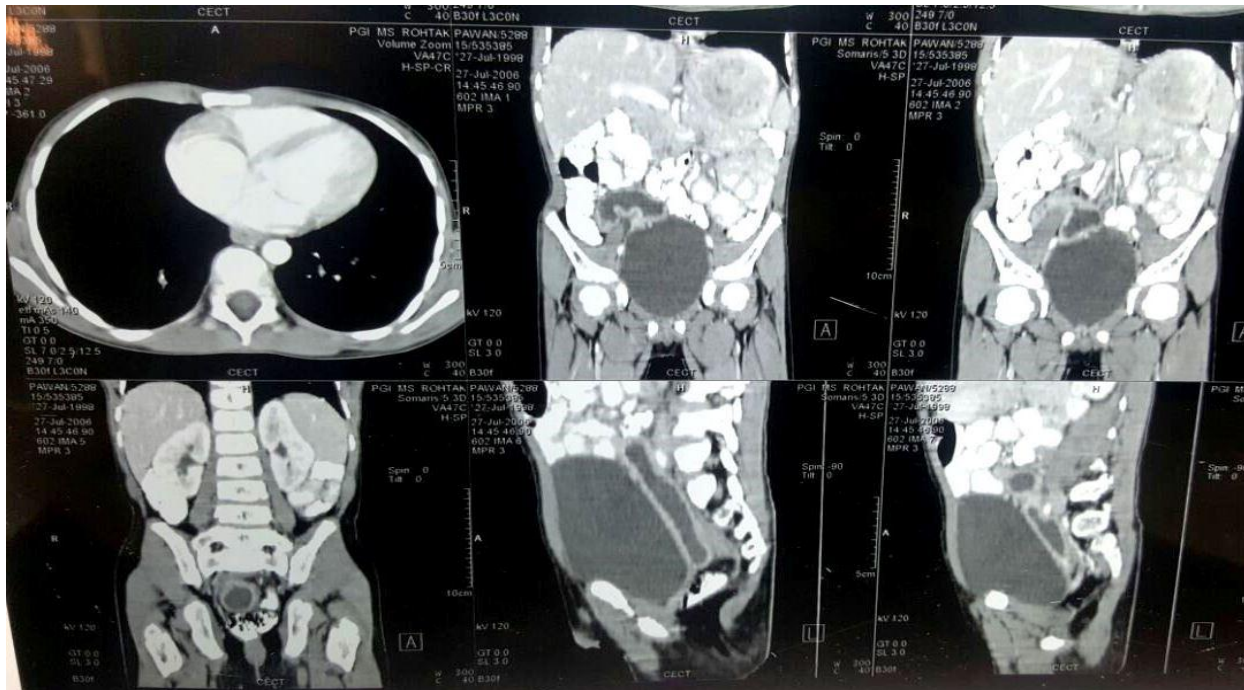


Figure 1. CT showing a well defined cystic lesion with thick enhancing wall in recto sigmoid region.

## DISCUSSION

Duplication cysts of alimentary tract are generally cystic or tubular masses with presence of an intimate attachment to the GI tract, a layer of smooth muscle in the wall and an epithelial lining resembling some part of the GI tract. The cysts become incorporated into the bowel wall and share a common blood supply with the parent bowel. The most common site is the ileum, followed by esophagus, large bowel, jejunum, stomach and duodenum. The lesion tends to occur predominantly in males.

Atalar *et al* reported a case of enteric duplication cyst of ileal origin in 3-month-old girl where laparotomy showed a huge (35×10 cm), duplication cyst originating from the mesenteric side of the bowel.<sup>[4]</sup> The index case was of giant pedunculated pelvic ileal duplication measuring 15×15 cms mimicking rectal duplication.

The clinical manifestations of duplication cysts are quite nonspecific and vary according to the size, morphology and location of the cysts. Abdominal pain, distension, vomiting, constipation, gastrointestinal bleeding or intestinal obstruction are the common symptoms.<sup>[5]</sup> Thus, in cases of such huge intra abdominal pelvic cystic masses, certain differential diagnosis needs to be considered including pelvic abscesses, sacrococcygeal teratoma type III, bladder diverticulum, rectal duplication and pelvic cystic hygroma.

A number of imaging modalities such as plain abdominal radiograph, barium study, transabdominal ultrasonography, CT and MRI corroborated with

histopathological findings are helpful to arrive at specific diagnosis. Endoscopic ultrasound (EUS) is the diagnostic tool of choice for the evaluation and diagnosis of duplication cysts since it can distinguish between solid and cystic lesions. Surgery remains the mainstay of treatment which includes excision of the whole lesion, usually with the related normal bowel segment.

## CONCLUSION

Pelvic giant duplication cysts, although rare, should be kept as one of the differential diagnosis in pelvic cystic masses.

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