

RETROPERITONEAL DUPLICATION CYST

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INTRODUCTION:

Alimentary tract duplications are rare congenital anomalies that may be found from mouth to anus. Duplications are usually single, vary in size, are often spherical and lined by alimentary tract mucosa. Usually they share a common smooth muscle wall and blood supply with the adjacent bowel and may communicate with that. Rarely they present as retroperitoneal enterogenous cyst. We report one such case.

CASE REPORT:

18 months old girl presented with intermittent colicky abdominal pain and vomiting for the last four months. General examination was unremarkable. On abdominal examination there was no features of intestinal obstruction and a well defined spherical nontender mass of about 5 cm. in diameter was felt in the right iliac fossa. The mass was also felt in per-rectal examination.

Blood investigations, plain X-rays of chest and abdomen were normal. USG revealed a cyst in the right iliac fossa and pelvis without any other alimentary tract or genitourinary abnormality.

On laparotomy a retroperitoneal cyst of about 5 cm. was found to be firmly attached with the right Fallopian tube. It was not attached with bowel or mesentery. There was no other abnormality in the bowel or mesentery. Complete excision of the cyst was done.

Gross examination showed a globular mass with glistening muscles in the wall and a central lumen lined by mucosa (Fig. 1). Histopathology showed

Figure 1

Retroperitoneal duplication cyst with thick muscle wall and lined by mucosa.

it to be gastrointestinal type of mucosa with gastric mucus type of glands. A thick bundle of longitudinal and circular muscles were seen in the wall.

DISCUSSION:

Alimentary tract duplication can occur anywhere from neck to sacrum, but the commonest site is small intestine¹. Isolated retroperitoneal duplication cyst is very rare. Stringer et al² reported 3 cases in a series of 60 patients with symptomatic alimentary tract duplication and Bower et al³ reported 2 cases in a series of 64 patients.

85% of the cases of alimentary tract duplication present before 2 years of age³. It is more common in boys^{4,5}.

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Clinical presentation depends on location, communication with gut or vertebral canal, size, presence of heterotopic gastric mucosa and involvement of mesenteric vessels.

Intestinal duplication can lead to volvulus or intussusception. Foregut lesions may be associated with vertebral anomalies e.g. cleft vertebrae, spina bifida, hemivertebrae etc⁶. In the series of Stringer et al² heterotopic gastric mucosa was identified in 33% (1/3) cases of retroperitoneal cyst. It can cause peptic ulceration which may lead to painless haemorrhage, ulceration or even perforation.

Duplications can be diagnosed by many methods. Contrast studies of GI tract are helpful. USG is successful for diagnosis as well as detecting other genitourinary anomalies⁷. CT and MRI is helpful in assessing duplication and any spinal anomaly. Large retroperitoneal cysts may distort mesenteric vessels and preoperative MRI or angiography should be considered². In many children the diagnosis is not made before surgery, like in our case⁸. The preferred treatment is complete excision to avoid complications or rare chance of malignancy⁹. If complete excision is impossible in cases of long tubular lesions, large cysts or associated anomalies, then treatment options include internal drainage, mucosal stripping and staged excision¹.

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