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General Surgery

A CASE REPORT OF LITTRE's HERNIA

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ABSTRACT **Background –** Littre's hernia is uncommon clinical entity. Littre's hernia is the protrusion of Meckel's diverticulum through a ventral hernia sac. Meckel's diverticulum is the most common congenital malformation of the gastrointestinal tract involving 97% of omphalomesenteric duct malformations. It was first described in 1809 by the German anatomist Johann Meckel (1). However, it was not until almost 100 years later that the understanding of Meckel's diverticulum increased with the discovery of ectopic gastric mucosa by Salzer and associated ileum ulceration by Deetz (2). Treatment of symptomatic Meckel's diverticulum is definitive surgery including diverticulectomy, wedge resection and segmental resection; the type of procedure depends on the integrity of diverticulum base and adjacent ileum as well as the presence and the location of ectopic tissue within Meckel's diverticulum. Prophylactic resection of an accidentally discovered Meckel's diverticulum is debatable and is reasonable that the decision-making of resection to be based on identified risk factors (3). Case summary - In our case a 43- year-old obese female presented to the emergency department with vomitings, pain, and swelling in the right lower abdomen. On evaluation, she was diagnosed with acute intestinal obstruction due to incisional hernia from a previous surgery for abdominal hysterectomy. She was posted for exploratory laparotomy. Intra operatively contents are multiple dilated ileal bowel loops with normal wide-mouth Meckel's diverticulum, contentsare reduced, defect is closed and mesh was placed. Meckel's diverticulum was not resected.

KEYWORDS : Littre's hernia, Meckel ' diverticulum

INTRODUCTION

Littre's hernia is the protrusion of Meckel's diverticulum through a ventral hernia sac. In some cases accompanied by inflammation, gangrene. It's a rare entity and its diagnosis is often incidental during routine hernia repair surgery or when it causes complications.(4)

True littre hernia involves only a Meckel's diverticulum and no other viscera, small intestine often also an occupant of the sac and thus combined or mixed. Meckel's diverticulum incidence is unknown but it is reported that 1% of patients having it will develop a Littre's hernia. (4) It is the only congenital diverticulum found on the antimesenteric border of the ileum, at a distance of 20–90 cm from the ileocecal valve. It usually asymptomatic . Only around 4% of the patients, having a Meckel's diverticulum presents with complications viz : gastrointestinal bleeding, bowel obstruction, inflammation, and perforation. (5) Its symptoms are similar to any other abdominal hernia containing the bowel and its complications, and as a result, it's diagnosis is made intraoperatively.2

CASE STUDY

We report a case of 43 year old house wife resident of anakapalli came to the Emergency department with complaints of Abdominal distension, vomiting, painful swelling in the abdomen and not passing stools for 3 days.

Patient was apparently normal 3 days before and She noticed swelling in the lower abdomen which was present for last one year was not disappearing on lying down for the last three days and was painful .

Pain in the abdomen for the last three days was gradual in onset began as a slight discomfort, slowly increased and was colicky in nature Vomiting's were bilious non projectile containing food particles She did not pass stools but was passing flatus Swelling was insidious in onset and she noticed swelling in the lower abdomen accidentally while doing work and when she relaxed swelling disappears and as the time progressedswelling became more and more prominent Patient had history of two surgeries 1 LSCS 16 years ago and 1 abdominal hysterectomy 13 years ago On general examination She is 100 kilos in weight BMI is 38.6 She was afebrile, Normal heart rate and Normotensive.

On per abdomen examination :-

A distended abdomen with a single tender swelling oval in shape of size approximately 15 * 10 cm in the lower mid line towards right side extending from below umbilicus to skin crease with a smooth surface and no changes of skin over the swelling. Cough impulse present but swelling is partially reducible.

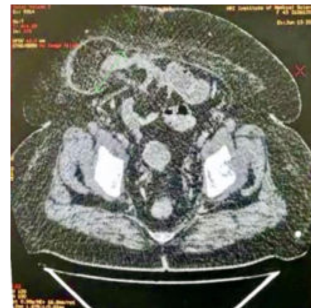
2 scars one lower midline vertical scar and one pfannensteil scar.

A provisional diagnosis of sub acute intestinal obstruction secondary to incisional hernia was made

Imaging done

Erect x ray Abdomen :- Dilated small bowel loops with multiple air fluid levels

CECT Abdomen :- Anterior abdominal defect of size 4.5 cm in the supra pubic region on the right side with herniation of distal ileal loops that showed enhancement and dialated bowel diameter is > 2.5 cm.



Blood samples were sent Total white cell counts , differential counts and lactate within normal limits.

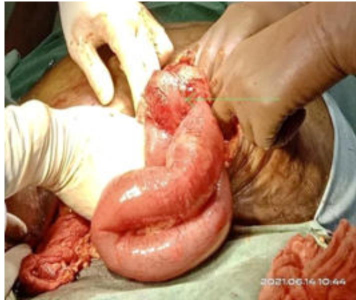
She was noted to be hypothyroid with a TSH of 120 IU. She was kept under strict observation for Abdominal distension, guarding, fever tachycardia and hypotension.She was kept NPO , I/V fluid resuscitation was started , NG tube was placed and Foleys catheterization done.

She was observed for 36 hours and upon no relief Exploratory laparotomy was the only option of treatment.

Pre op assesment was carried out and an informed consent regarding resection & anastomosis , stoma was taken. Patient and next of kin were informed of complications like respiratory arrest, need for ventilatory support.

Intra operative findings :-

Contents of hernia sac are multiple viable ileal bowel loops with a wide mouth meckel's diverticulum of length < 2 cm , the contents were adhered to sac and multiple adhesions to the ileal loops.



A defect of size 5 cm in the midline Defect was closed with 1 prolene Onlay repair with prolene mesh Abdominal drain and subcutaneous drain were kept Resection of the incidentally found meckels diverticulum was not done.

In Post operative period enhanced recovery protocols were followed such as Early mobilization, Respiratory exercises, Ted Stockings.

Post op recovery was uneventful Abdominal drain was removed on second day and subcutaneous drain was left alone Patient was sent home on pod 5 with subcutaneous drain Suture removal and drain removal was done on pod 8

DISCUSSION

The Treatment of incidental meckel's diverticulum in an adult patient is controversial.

A Case study by Soltero and bill has shown that chances of incidentally detected meckel's diverticulum becoming symptomatic in adult patient was less than 2%. (6)

A Meta analysis by Zani etal.has shown that 758 prophylactic diverticulectomies needed to perform to prevent one meckel's related death. (7)

Regarding management of incidental meckel's diverticulum, surgical resection is not an indication.(8)(9) The decision depends on risk factors for developing future complications in the patient, such as: (8)

(1) patient age younger than 50 years;
(2) male sex;
(3) diverticulum length >2 cm; and
(4) ectopic or abnormal features within a diverticulum.

In our case we have not resected the incidentally found meckel's diverticulum because of the following reasons Female sex, length of diverticulum < 2 cm and there are no ectopic or palpable abnormalities found in the intra operative period

CONCLUSIONS

For an incidental detection of Meckel's diverticulum, a surgeon should decide for surgical resection weighing the risk and benefits of complications. (8)

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