

Case report

Colon and kidney in left sided Bochdalek's hernia

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Keywords : Bochdalek's hernia, colon and kidney.

Abstract:

This is a case report of 70 years old female patient who is presented with partial intestinal obstruction. Barium enema showed only cut off at level of splenic flexure of descending colon. Laparotomy was done and showed Bochdalek's hernia containing colon and left kidney, which were released with closure of the hernia.

Hernia through the foramen of Bochdalek is really the persistence of pleuroperitoneal canal and the opening in the dome of the diaphragm posteriorly. It is the most common diaphragmatic hernia in children and presented with severe respiratory distress, There is classic triad of respiratory distress, apparent dextrocardia and scaphoid abdomen⁽¹⁾.

Case report:

A 70 year old female from North of Iraq presented with recurrent attacks of abdominal pain, which was colicky in nature mainly in the left upper quadrant not radiated to any site of six months duration. The pain usually follows meals. The condition increased in the last month and started to be associated with vomiting and constipation which is not absolute but associated with abdominal distension.

She consulted many doctors; supportive therapy for constipation was given but no improvement. The patient did not lose weight. Then she consulted a gastroenterologist. Colonoscopy was done. The colonoscope reached only 90 cm where a constricting segment was seen and could not reach above it.

Biopsy showed normal tissue. Barium enema done and showed constriction in the splenic flexure of descending colon, Fig. (1,2,3).

Review of other systems showed nothing of significance.

The patient was a multiparous, not smoker and no drug history and not diabetic nor hypertensive.

On examination :

A 70 year old female, conscious, lying comfortable in bed, well built, not dehydrated, not jaundiced, not anemic, no clubbing, no cyanosis.

BP 140/90, temp 37.2°C, PR 80/min regular, RR 14/min thoracoabdominal

Head and neck : no lymphadenopathy, no facial palsies

Chest : symmetrical, no abnormality, resonant, NVB

Abdomen: slightly distended, umbilicus flat, no dilated veins, no tenderness and mild heaviness in the left hypochondrium, no hepato- splenomegaly, resonant abdomen , no sign of ascites, bowel sounds were normal, PR & PV were normal.

Laboratory findings :

Hb 11 mg/dl, PCV 33%, B.urea 32mg/dl, S.creatinine 0.9mg/dl, ESR 11.

Provisional diagnosis: carcinoma or lymphoma, fecal impaction or inflammatory bowel disease.

Operation was done through midline incision under GA explorative laparotomy showed No ascites, no liver mass with mobilization of the left colon done, the splenic flexure was going upward, so mobilization of the spleen done

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Fig 1

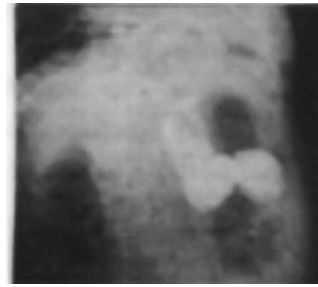


Fig 2

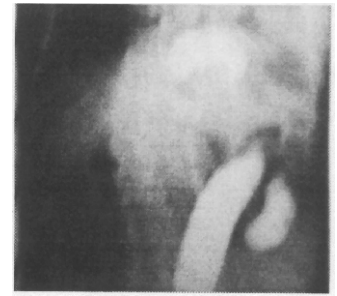


Fig 3

medially. The splenic flexure of the colon with left kidney passing through a defect in the left hemidiaphragm posteriorly. So after release of the adhesions and return, the kidney and colon to its position, closure of the Bochdalek's hernia was done with nephropexy.

Discussion :

Congenital diaphragmatic Bochdalek's hernia is rarely seen in adults ⁽²⁾. Although it is mentioned that the incidence was 0.17% based on CT scan reports and mean age of adult presented with this type of hernia was 66.6 years, 73% contain only spleen, small bowel, large bowel, stomach, and rarely kidney. The majority are asymptomatic ⁽³⁾.

This patient was asymptomatic until few months ago. She was living with her hernia for her life with colon and kidney were herniated in the chest and asymptomatic which is interesting. This raises the question whether ascent of the metanephron continues postnatally and affect development of the diaphragm taking with it the splenic flexure of the colon.

It is important to mention that intrathoracic kidney is very rare congenital anomaly with only 50 cases reported in the world literatures and incidence of intrathoracic kidney with Bochdalek's hernia was reported to be less than 0.25% ⁽⁴⁾, but no report about a kidney and colon in the same case.

Recently, Bochdalek's hernia can be classified as small, medium and large. This is according to CT-scan ⁽⁵⁾.

Although Bochdalek's hernia usually on the left side, it can occur on the right side and bilateral hernia 0.9% ⁽³⁾.

It is important to mention complications of Bochdalek's hernia in adults and children.

1. respiratory distress ⁽¹⁾.
2. incarceration in Bochdalek's hernia ⁽⁶⁾.
3. rupture viscus (stomach and colon leads to pneumothorax) ^(6,7).
4. obstructive uropathies, ureteric entrapment and kidney ⁽⁵⁻⁸⁾.
5. strangulation and bleeding and gangrene. Bleeding

3. Rupture viscus (stomach and colon leads to Pneumothorax) ^(6,7).
4. obstructive uropathies, ureteric entrapment and kidney ⁽⁵⁻⁸⁾.
5. strangulation and bleeding and gangrene. Bleeding from engorged viscera ⁽⁹⁾.

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