The Chilaidit[illegible] yndrome Case Report

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Summary: Hepatodiaph[illegible]matic interposition of the colon is a rare anomaly described by Chilaiditi in 1910 .Usually this syndrome presents as a[illegible] symptomatic roentgen finding, although occasionally it is associated with a broad range of gastrointestinal symptom[illegible] This is a case report of the Chilaiditi syndrome associated with mechanical intestinal obstruction.

Key Words: Chilaiditi sy[illegible]drome, colonic interposition, hepatodiaphragmatic interposition.

Hepatodiaphragmatic i[illegible]erposition of the colon (Chilaiditi's syndrome) is a rare anomaly (I). The incidence in general population ranges from [illegible].025 to 0.28 percent (1,4,5). The sex ratio is 4:1 men to women (5). The anatomic anomaly is usually the interpositio[illegible] of the hepatic flexura or transverse colon. Most commonly interposition is an asymptomatic roentgen finding. This i[illegible] a case report of Chilaiditi's syndrome in combination with acute mechanical bowel obstruction.

Case Report

A 82-year-old man wa[illegible] admitted to The Department of General Surgery in November 1985 for an acute abdominal problem. He had beer[illegible] suffering from left hemiplegia since 1983. His symptoms were severe cramping pain in right upper quadrant, vomit[illegible]g and failure to pass gas and feces. These symptoms had began three days ago. In abdominal examination, there w[illegible] muscular rigidity and sensilivity at the right upper quadrant and abdominal distention was observed. Loudy and[illegible] metallic intestinal sounds were heard in auscultation. Labaratory values were: Hb: 12 gr %, WBC:15.000/mm^3,B[illegible]N:27 mg % Na:129 mEq/1,L,K:4.8 mEq/1, CL:94 mEq/1. A chest radiograph and plain abdominal radiographs showed [illegible]epatodiaphragmatic interposition of the colon(Fig:1,2). Barium enema illustrated entrapment and dilatation of the prox[illegible]al transverse colon.

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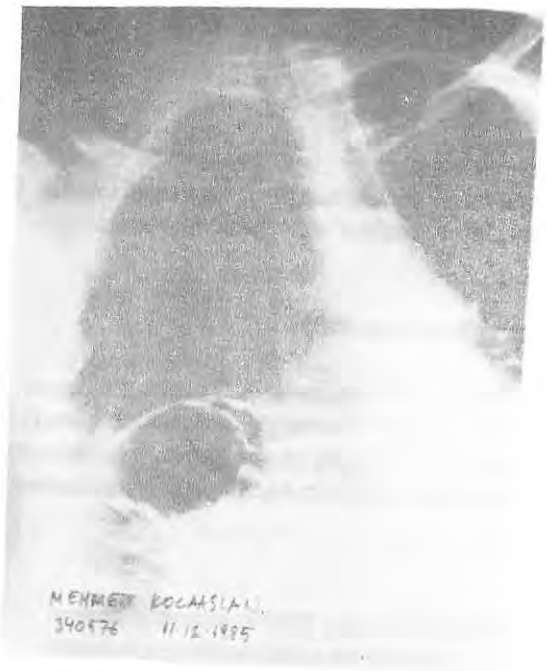

Fig. 1:Chest radiograph shows three characteristic radiologic features of symptomatic interposition:
1)Elevation of right hemidiaphragm;
2)Distended, fixed interposed hepatic flexura; and
3)Down-ward displacement of the liver.

Fig. 2:Lateral chest radiograph reveals haustral markings in the interposed colon.

Laparotomy was performed after a short duration nasogastric decompression and intravenous hydration. The preoperative diagnosis was right diaphragmatic hernia and mechanical intestinal obstruction. At laparotomy, transverse colon was found to be fixed by adhesions to the diaphragm and the diaphragm was obviously thin and lax, but a diaphragmatic hernia was not confirmed. The hepatic flexura was dissected and then mobilized from its abnormal position. The diaphragm was ruptured during this dissection and a basal chest tube was put in order to evacuate intrathoracic air and blood. We observed a large subdiaphragmatic space after dissection. The transverse colon was redundant and dilated for the associated adhesions. His postoperative course was complicated and the patient died onfifth postoperative day as a result of an acute pulmonary embolus

DISCUSSION

The Chilaiditi syndrome is a well-defined clinical entity. Its main symptoms are abdominal pain and distention with radiologic evidence of interposition of the colon between the diaphragm and liver in the erect position(2). Intestinal, hepatic and diaphragmatic factors have been implicated in the etiology of this syndrome(1.5).

The anatomic anomalies illustrated by this case are; relaxations of the diaphragma and the hepatic suspensory ligaments with a redundant, dilated colon. The liver easily accommodated interposition of the transverse colon by migrating to the midline. The proximal transverse colon was, "trapped" in the suprahepatic space.The transverse colon was obstructed with adhesions. The patient relieved after nasogastric decompression and intravenous hydration.

This case illustrates the importance of abnormal colonic mobility in the etiology of Chilaiditi's syndrome. The significance of this abnormal mobility has been discussed by other authors (2,3).

There are only three reported cases treated surgicaly for Chilaiditi's syndrome(3).Rogers freed the adherent colon from its abnormal position and then fixed it to the parietal peritoneum at the level of the umbilicus. Hepatopexy has been used for this condition by suturing divided falciform ligament to the right costal border(3).

This emergency case is a colonic interposition with a reversible mechanical intestinal obstruction required surgical intervention. Hepatopexy was not performed in this case.

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