Answer

Chilaiditi Sign or Syndrome

Chilaiditi sign refers to the usually asymptomatic interposition of the bowel (usually the hepatic flexure of the colon) between the liver and the right hemidiaphragm. It was first described by a Viennese radiologist, Demetrius Chilaiditi, in 1910.[1] This phenomenon is seen in 0.025% to 0.28% of the general population.[2] The findings are most often incidental; the condition is slightly more common in males, adults, and individuals with cognitive impairment; and symptoms may present intermittently[3]. The term *sign* refers to the asymptomatic presence of the interposed bowel, whereas the term *syndrome* includes abdominal pain, constipation, vomiting, respiratory distress, anorexia, and rarely, volvulus or obstruction.

Colonic fixation and suspensory ligaments, coupled with the normal anatomy of the diaphragm and the liver, normally inhibit this potential interposition.[2,4-7] Predisposing factors to its occurrence include absence of the normal suspensory ligaments of the transverse colon, abnormality or absence of the falciform ligament, redundant colon (as might be seen with chronic constipation or bedridden individuals), excessive aerophagia in children (secondary to increased colonic air), right hemidiaphragm elevation (paralysis or eventration), an enlarged thoracic cage in emphysema (leaving extra space for potential colon migration), congenital malposition or malrotation (leading to increased colonic mobility), ascites (the "floating liver" of ascites can be more easily displaced by the adjacent hepatic flexure), or multiple pregnancies.[5,6,8,9]

Treatment of Chilaiditi syndrome includes nonoperative approaches (bed rest, fluid supplementation, nasogastric decompression, enemas, cathartics, high-fiber diets, and stool softeners). However, 26% of patients may require colectomy.[3,10,11] Alternatively, laparoscopic colopexy has been described.[12]

In conclusion, recognition of Chilaiditi syndrome and its spectrum is important because if this entity is mistaken for a more serious abnormality (pneumoperitoneum, subphrenic abscess, ruptured abdominal viscus, posterior hepatic lesions, or retroperitoneal masses), unnecessary surgical intervention may result.

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Submissions

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