Ogilvie Syndrome and Chilaiditi Syndrome: a Strange Association

I. Bodega Quiroga · P. Tejedor Togores · J. M. Peraza Casajús ·
A. Villadóniga · M. I. Sánchez-Seco Peña ·
A. Serrano Muñoz

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Abstract Chilaiditi syndrome is a strange disease which includes the existence of Chilaiditi sign and other abdominal symptoms. Chilaiditi sign refers the interposition of the colon between the liver and diaphragm that could be misinterpreted to be a pneumoperitoneum. We present a 46-year-old male patient who was admitted in the hospital with constipation and abdominal oppressive pain located in the epigastric area. He showed signs of peritoneal irritation, no bowel sounds, hernias, or organ enlargements. Laboratory analysis only revealed CPK elevation (462 U/L). Abdominal and chest radiographs showed an image which suggested a pneumoperitoneum. The patient underwent emergency surgical treatment, under diagnosis of viscera perforation. At laparotomy, an interposition of the transverse colon between the liver and diaphragm were visualized, although no perforations were present. Psychiatric treatment was held until this moment due to the high risk of schizophrenia outbreak. During the next 48 h, intestinal transit was restored and he was discharged on postoperative day 40, diagnosed with Ogilvie syndrome secondary to psychotropics. The relationship between Ogilvie syndrome and psychiatric treatments is known, but the association between Ogilvie and Chilaiditi syndrome is very strange. Nevertheless, it could be misinterpreted like a pneumoperitoneum and led to the performance of emergency surgery.

Keywords Chilaiditi sign · Ogilvie syndrome · Pneumoperitoneum · Pseudo-obstruction · Schizophrenia

Case Presentation

Chilaiditi syndrome is a strange disease which includes the existence of Chilaiditi sign and other abdominal symptoms [1]. Chilaiditi sign refers to the interposition of the colon between the liver and diaphragm. Some authors suggest that its incidence is 25 % [2]. It is usually found during the study of an acute abdomen. Chilaiditi sign (Fig. 1) could be misinterpreted to be a pneumoperitoneum, leading the surgeon to indicate surgery under suspected viscera perforation.

We present a 46-year-old male patient who was admitted in the hospital with constipation and abdominal oppressive pain located in the epigastric area. He showed signs of peritoneal irritation without hernias. Laboratory analysis only revealed CPK elevation (462 U/L). Abdominal and chest radiographs suggested a pneumoperitoneum. The patient underwent emergency surgical treatment, under diagnosis of viscera perforation. At laparotomy, an interposition of the transverse colon between the liver and diaphragm were visualized, although no perforations were present. Psychiatric treatment was held until this moment due to the high risk of schizophrenia outbreak. Intestinal transit was restored and he was discharged with a diagnosis of Ogilvie syndrome secondary to psychotropics.

The relationship between Ogilvie syndrome and psychiatric treatments is known. Nevertheless, in a revision of the literature, only two references about this association between Ogilvie syndrome and Chilaiditi syndrome were found [3, 4]. The misinterpretation of the transverse

I. Bodega Quiroga (✉) · P. Tejedor Togores ·
J. M. Peraza Casajús · A. Villadóniga · M. I. Sánchez-Seco Peña ·
A. Serrano Muñoz
Department of General and Gastrointestinal Surgery, Hospital
Central de la Defensa “Gómez Ulla”, Glorieta del Ejército s/n,
Madrid, Spain
e-mail: marnac@eresmas.com

Fig. 1 Gas interposition between the liver and the diaphragm (Chilaiditi sign)

colon like a pneumoperitoneum led to the performance of emergency surgery. Computed tomography scan is strongly recommended to minimize the risk of unnecessary surgery [5].

Chilaiditi syndrome has been associated with schizophrenia [1]. The removal of psychiatric medication allowed the

resolution of the intestinal pseudo-obstruction. We did not find other similar cases published which had led to emergency surgery, although in a review of the literature, it can be said that the misinterpretation of the Chilaiditi sign like ectopic gas is not an exceptional case [6, 7].

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