CASE REPORT – OPEN ACCESS

International Journal of Surgery Case Reports 39 (2017) 106–109

Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

Pylephlebitis and Crohn's disease: A rare case of septic shock

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ARTICLE INFO

Article history:
Received 18 June 2017
Received in revised form 29 June 2017
Accepted 8 August 2017
Available online 10 August 2017

Keywords:
Crohn's disease
Pylephlebitis
Septic shock
Gastroenterology
Surgery

ABSTRACT

INTRODUCTION: Troncular pylephlebitis, defined as septic thrombophlebitis of the portal vein, is usually secondary to suppurative infection from the regions drained by the portal system. Therefore, pylephlebitis can occur from the portal vein main tributaries. The occurrence of mesenteric pylephlebitis in Crohn's disease is extremely rare.
PRESENTATION OF CASE: We describe a case of septic shock due to mesenteric pylephlebitis in a 47 years old male affected with Crohn's disease. The patient was admitted to the emergency department after he had been complained from 3 h of a *peri*-umbilical abdominal pain associated to fever and shivering quickly followed by a severe hypotension. His medical history included histologically confirmed ileal Crohn's disease diagnosed 4 years before and treated with mesalamine only. Computed tomography scan confirmed the mesenteric pylephlebitis diagnosis. After medical therapy with antibiotics and systemic nutrition, the patient was successfully operated to treat his ileal Crohn's disease.
DISCUSSION: In our case, the quick onset of a septic shock was not due to a peritonitis complicating a Crohn's disease, but to a rare condition not needing an urgent surgical resolution. This report shows that, even in Crohn's disease, once diagnosis is performed, antibiotic therapy associated to enteral and parenteral nutrition can lead to a complete clinical remission of mesenteric pylephlebitis, mandatory to perform an elective surgery.
CONCLUSION: This case highlights the importance of promptly considerate and treat mesenteric pylephlebitis in presence of a septic shock in a Crohn's disease patient who is not showing clinical signs of peritonitis.

1. Introduction

Pylephlebitis, defined as septic thrombophlebitis of the portal vein system, is usually secondary to a suppurative process developed in the region drained by the portal vein (troncular phylephlebitis) or by its main tributaries (mesenteric or splenic phylephlebitis) [1]. Pylephlebitis was diagnosed at autopsy and described for the first time by Waller in 1846 in a patient affected with appendicitis [2]. In the past its prognosis was extremely poor, but broad-spectrum antibiotics and surgical removal of the infective focus were able to decrease both its incidence and mortality.

Pylephlebitis was described as a Crohn's disease complication in 1946 by Taylor [3] and, to the best of our knowledge, only other 8 cases have been reported so far [2,4–8]. Furthermore, only in three of them the superior mesenteric vein was described to be primarily involved. We report a case of septic shock due to mesenteric pylephlebitis in a patient affected with recently diagnosed ileal Crohn's disease. This work has been reported in line with the SCARE criteria [9].

2. Presentation of case

A 47-year-old man was admitted to the emergency department because of a septic shock. He had been complained from 3 h of a *peri*-umbilical abdominal pain associated to fever and shivering. These symptoms were quickly followed by a severe hypotension. His medical history included histologically confirmed ileal Crohn's disease diagnosed 4 years before and treated with mesalamine only. He was 187 cm tall and 92 kg weight. Physical examination revealed a fixed *peri*-umbilical mass without abdominal guard-

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http://dx.doi.org/10.1016/j.ijscr.2017.08.009

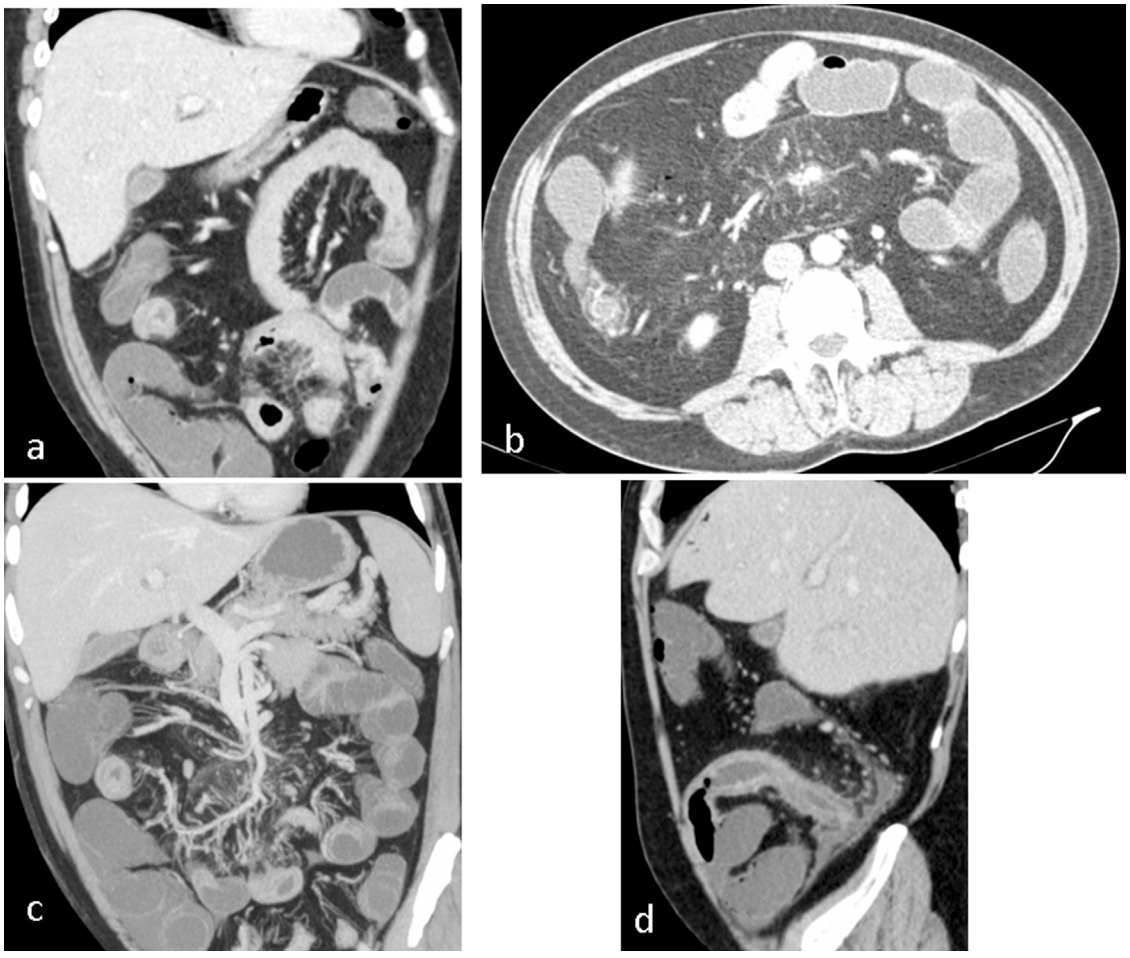

Fig. 1. Thickening and alteration of the intestinal wall (1a); small air bubbles were visible in the mesentery (1b). Fat stranding with obstruction of the inferior mesenteric vein (1c); peripheral linear collections of gas in the liver (1d).

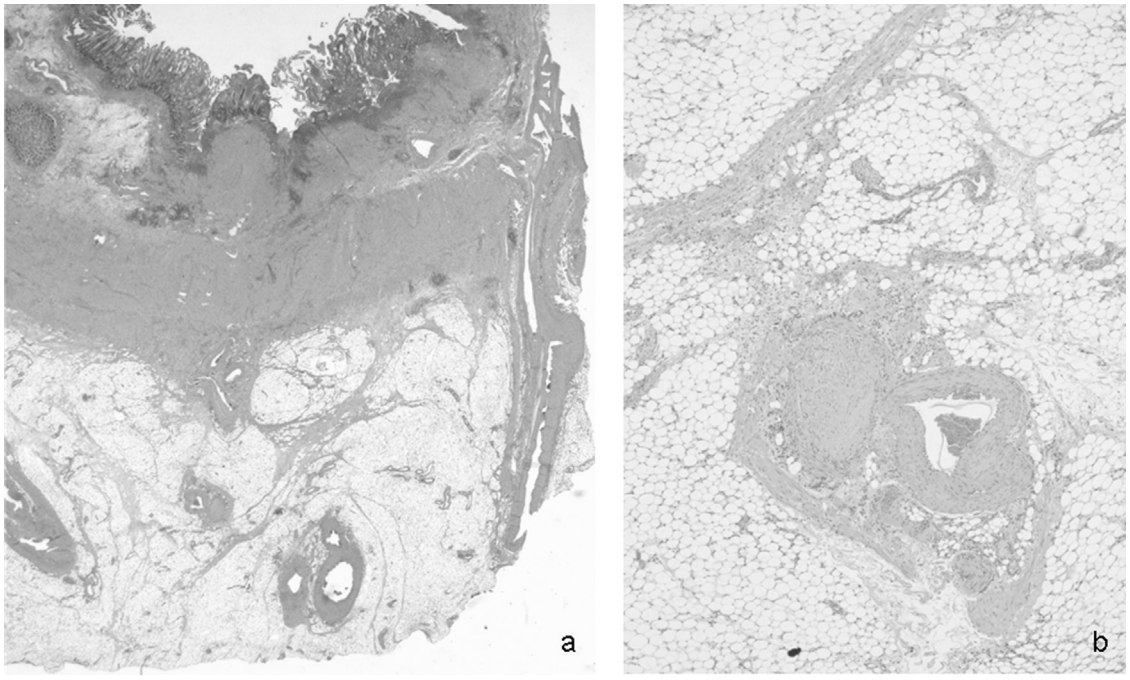

Fig. 2. Crohn'disease of the ileum with associated obliterative vasculopathy: haematoxylin and eosin stain x 20 HPF (a); haematoxylin and eosin stain x100 HPF (b).