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Abdominal Cocoon: "Cauliflower Sign" on Contrast-Enhanced Computed Tomography Scan

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Keywords
Abdomen · Cocoon · Gastrointestinal tract

Casulo Abdominal: "Sinal Couve-Flor" Na TC com Contraste

Palavras Chave
Abdominal · Casulo · Tracto gastrointestinal

A 58-year-old man presented with complaints of abdominal pain and bilious vomiting for 2 days. Twenty days before, he had undergone exploratory laparotomy with adhesiolysis, segmental ileal resection, and end ileostomy for acute intestinal obstruction and ileal gangrene. Contrast-enhanced computed tomography (CECT) showed clumping of ileal loops surrounded by a thick membrane ("cauliflower sign") (Fig. 1) consistent with encapsulating peritoneal sclerosis (EPS). Clumping of dilated small bowel loops in a narrow base surrounded by a thick membrane seen on CT in patients with EPS or the abdominal cocoon is called the "cauliflower sign" [1, 2]. EPS is characterized by the partial or total encasement of the small bowel by a fibro-collagenous membrane. It can be idiopathic or due to abdominal tuberculosis, chronic peritoneal dialysis, peritoneovenous shunts, sarcoidosis, use of drugs, such as propranolol, and abdominal surgeries [2]. All these conditions cause peritoneal irritation and inflammation, which leads to fibrosis. The "cauliflower sign" is also seen on ultrasound and barium studies [2, 3]. Differential diagnoses include congenital peritoneal encapsulation, peritoneal carcinomatosis, and internal hernias [2]. Though traditionally managed surgically with dissection of the abdominal cocoon and extensive interbowel adhesiolysis, conservative medical treatment with renin-angiotensin-aldosterone system blockers, immunosuppressants, and tamoxifen have been currently used with variable success rates [2]. EPS in this particular case is probably related to the major abdominal surgery performed 20 days before. The patient underwent surgery for simple removal of the membrane and lysis of the adhesions.

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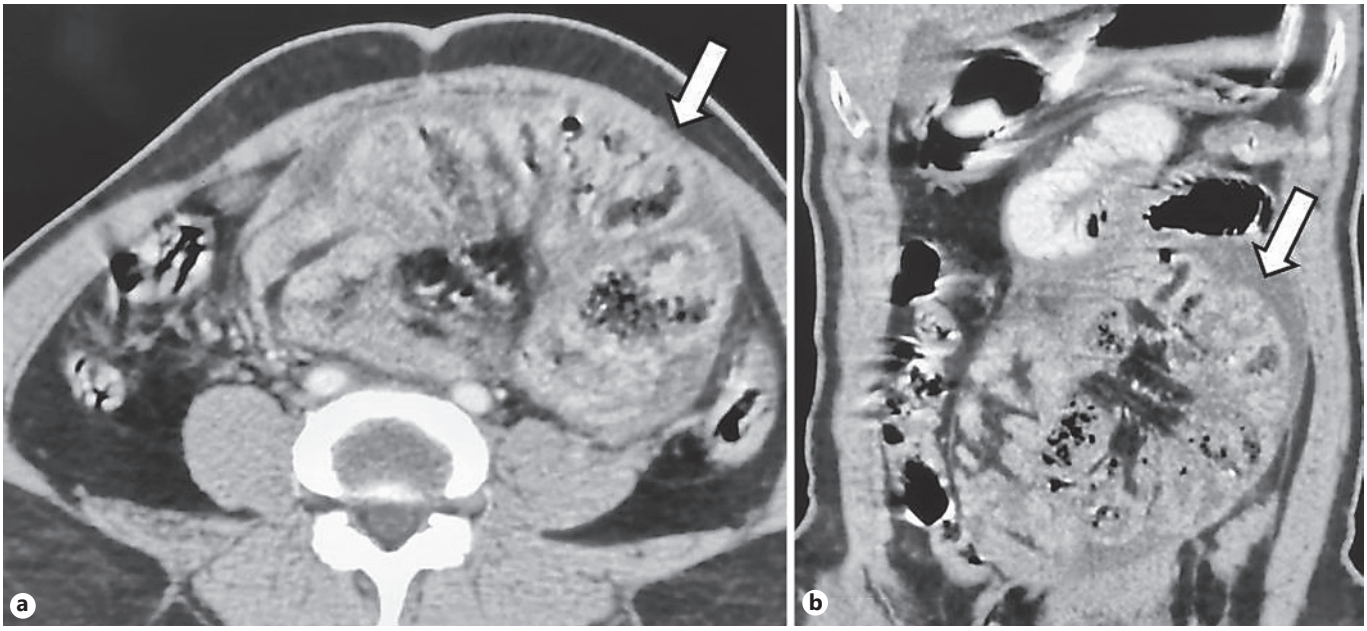

Fig. 1. CECT axial section (**a**) and coronal reformat (**b**) of the abdomen showing clumping of small bowel loops in a narrow base surrounded by a membrane resembling a cauliflower ("cauliflower sign").

Statement of Ethics

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Informed consent was obtained from individual participant included in the study. This article does not contain any studies with animals performed by any of the authors.

Disclosure Statement

The authors have no conflicts of interest to declare.

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Author Contributions

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