

## IMAGES IN EMERGENCY MEDICINE

## Imaging

# Man with abdominal pain

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Email: [blaise.anthonissen@gmail.com](mailto:blaise.anthonissen@gmail.com)**KEYWORDS**

Encapsulating sclerosis, Peritoneal dialysis

## 1 | CASE DESCRIPTION

A 68-year-old man on peritoneal dialysis for 4 years was admitted to the emergency department for abdominal pain. The patient had been switched to hemodialysis 1 week before admission after he had presented with acute peritonitis due to *Staphylococcus epidermidis* and a hemorrhagic dialysate attributed to acenocoumarol surdosage. Computed tomography (CT) scan showed thickened peritoneum, dilated bowel loops, and cocoon-like bowel encapsulation (Figure 1).

## 2 | DIAGNOSIS AND DISCUSSION

The diagnosis of encapsulating peritoneal sclerosis was confirmed at exploratory laparotomy but no surgical procedure was possible because of the extension of the fibrotic lesions and a concern for diffuse bowel perforation. Medical treatment was initiated with nutritional support and corticosteroid administration.

Long-term peritoneal dialysis is associated with a chronic inflammatory state within the peritoneal membrane leading to vascular proliferation, neoangiogenesis, and submesothelial fibrosis. Encapsulat-

ing peritoneal sclerosis is the rare latest stage of those long-term peritoneal membrane alterations.<sup>1</sup> It is often preceded by previous peritoneal dialysis-related peritonitis episodes or temporary or definitive peritoneal dialysis withdrawal.<sup>2</sup> Encapsulating peritoneal sclerosis diagnosis essentially relies on CT scan showing peritoneal calcifications, thickened peritoneal membrane, and dilated bowel loops. Effective treatments associate surgical enterolysis, nutritional support, and administration of steroid and immunosuppressive (sirolimus, or mycophenolate mofetil) or antifibrotic (angiotensin-converting enzyme inhibitors or tamoxifen) drugs. Fatal outcome occurs in more than 50% of the cases because of malnutrition or sepsis.<sup>3</sup> The incidence ranges from 0.7% to 2.5% and the occurrence increases with time.

Encapsulating peritoneal sclerosis is a rare and fatal complication of long-term peritoneal dialysis. An early diagnosis is required to implement safe and effective treatments associating surgery (ie, extensive enterolysis), immunosuppressive drugs administration, and nutritional support.

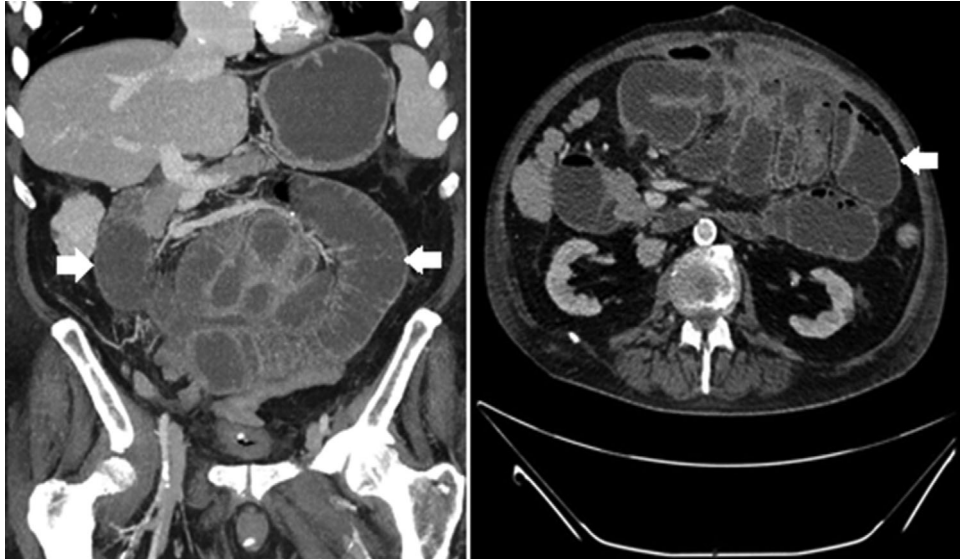
**CONFLICTS OF INTEREST**

S. Leflot, B. Anthonissen, E. Danse, and E. Goffin have nothing to disclose.

Sophie Leflot and Blaise Anthonissen contributed equally to this work.

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**FIGURE 1** Abdominopelvic computed tomography (CT) after injection of contrast product showed cocoon-like bowel encapsulation and dilated bowel loops

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**How to cite this article:** Leflot S, Anthonissen B, Danse E, Goffin E. Man with abdominal pain. *JACEP Open*. 2020;1:1147–1148. <https://doi.org/10.1002/emp2.12248>