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Abdominal cocoon in peritoneal dialysis – a fatal outcome

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DESCRIPTION

Sclerosing peritonitis (SP, encapsulating peritoneal sclerosis or abdominal cocooning) is an inflammatory process affecting the peritoneum diffusely and constitutes a rare but life-threatening (figure 1), serious complication in patients on long-term continuous ambulatory peritoneal dialysis (CAPD).1 2 An overall prevalence of 0.7%2 has been described in literature. The pathogenicity of this condition still remains unclear. Predisposing factors described in the literature include episodes of infective peritonitis, prolonged duration on CAPD, the use of chlorhexidine in alcohol-sterilising sprays, acetate and hyperosmolar dialysate.^{2 3} SP is a wide-spread evolution involving the accumulation of new fibrous tissue that encapsulate and limit the viscera, thereby compromising the bowel motility.3 A slow reduction of peritoneal permeability by the fibrous tissue leads to ultrafiltration failure of CAPD. This slow evolving process causes malnutrition to worsen. Abdominal discomfort with evidence

of complete or partial bowel obstruction is the usual clinical presentation. ² ³ Classical CT findings (figures 2 and 3) include thickened adhered bowel loops, loculated ascites and peritoneal enhancement. Initial management involves the removal of dialysis catheter, discontinuation of CAPD, bowel rest and total parental nutritional support. ⁴ The use of steroids, immunosuppressives and tamoxifen has been reported to be beneficial, but needs to be validated. Surgery is high risk for fistula formation and anastomotic leakage. Despite various therapeutic modalities, the death rate is 56–93%. ⁴

Learning points

- ▶ A rare but life-threatening.
- ► Slow evolving process.
- Complete or partial bowel obstruction is the usual clinical presentation.



Figure 1 Laparoscopic view of abdominal cocoon.

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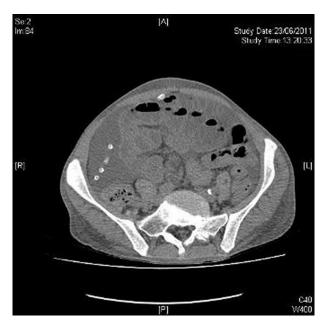


Figure 2 Non-contrast CT showing dilated bowel loops with continuous ambulatory peritoneal dialysis catheter.

Competing interests None.

Patient consent Not obtained.

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Figure 3 Non-contrast CT image showing multiple bowel loops with thickend peritoneum.

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Please cite this article as follows (you will need to access the article online to obtain the date of publication).

Noormohamed MS, Kadi N. Abdominal cocoon in peritoneal dialysis – a fatal outcome. BMJ Case Reports 2012;10.1136/bcr.01.2012.5581, Published XXX

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