

Calcium polystyrene sulfonate**S****Bowel perforation secondary to drug induced mucosal necrosis: case report**

A 59-year-old woman developed bowel perforation secondary to drug induced mucosal necrosis during treatment with calcium polystyrene sulfonate [Kalimate].

The woman, who had a history of end-stage renal disease, was hospitalised for abdominal pain and cloudy peritoneal dialysate. She developed hyperkalaemia on day 19 of hospitalisation for which she was started on oral calcium polystyrene sulfonate 15g four times daily. However, on day 21 she developed severe abdominal pain and hypotension. Ascites tapping was done, and it looked like fecal material. Pneumoperitoneum was revealed in an abdominal CT scan. Several perforated lesions in the ileum and sigmoid colon as well as a massive amount of yellowish fecal material inside the peritoneum was disclosed in an urgent surgery.

The woman underwent partial ileum resection, sigmoid colon repair and ileostomy. Transmural necrosis and perforation with basophilic angulated crystals extending from the ulcerated luminal surface into the transmural region of ileum were revealed in the pathology of the resected gut. An anastomotic leak complicated the post-operative course. On day 39 of hospitalisation she died due to a refractory septic shock.

Author comment: "Owing to severe abdominal pain soon after the use of Kalimate in our patient, we assumed that Kalimate was the cause of bowel perforation. The observation of angulated crystals of Kalimate with a characteristic crystalline mosaic pattern is crucial to diagnose Kalimate-associated mucosal necrosis."

Kao C-C, et al. Ileum and colon perforation following peritoneal dialysis-related peritonitis and high-dose calcium polystyrene sulfonate. Journal of the Formosan Medical Association 114: 1008-1010, No. 10, Oct 2015. Available from: URL: <http://doi.org/10.1016/j.jfma.2013.02.006> - Taiwan

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