Calcium polystyrene sulfonate



lleus due to ileal stenosis in an elderly patient: case report

A 75-year-old man developed ileus due to ileal stenosis while receiving calcium polystyrene sulfonate.

The man had chronic kidney failure and hyperkalaemia, and had been receiving oral calcium polystyrene sulfonate for 6 years [dosage not stated]. He presented with complaints of nausea and abdominal pain, and was was referred to hospital for investigation of ileus. At the time of hospitalisation, intestinal dilatation was observed on the oral side of the ileum. An ileus tube was inserted which produced decompression. Subsequent imaging of the ileus tube demonstrated stenosis of 5cm in length in the ileum. A double balloon enteroscopy showed stenosis from the ileocecal valve to about 30cm of the ileum.

The man underwent outpatient segmentectomy of the ileum. An excised sample was noted to display fibrillisation, granulation and an accumulation of small basophilic foreign bodies and foreign body-type giant cells scattered throughout the submucosal layers. These foreign bodies stained PAS-positive (magenta) and Ziel-Neelsen-positive. He was therefore diagnosed with ileal stenosis due to calcium polystyrene sulfate deposition. His calcium polystyrene sulfate was stopped, and his postoperative course was favourable. At last follow-up, he was receiving laxatives and undergoing outpatient observation.

Author comment: Due to the patient's history of oral administration, we diagnosed him with digestive tract stenosis due to calcium polystyrene sulfate.

Kato S, et al. Case report; a case of ileus due to ileal stenosis caused by oral intake of calcium polystyrene sulfonate. Nihon Naika Gakkai Zasshi 102: 150-2, No. 1, 2013 [Japanese; summarised from an English translation]. - Japan 803094409