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Management of distal intestinal obstruction syndrome by enteroscopy in a post-lung transplant patient

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Dear Editor,

The medical management of distal intestinal obstruction syndrome (DIOS) has been established. This condition is common in patients with post-lung transplant cystic fibrosis, but there is little experience with refractory cases (1). We present the case of a 24-year-old male patient with a history of cystic fibrosis (Delta F508 mutation) and post-transplant DIOS. Diagnostic colonoscopy showed abundant fecal matter and highly viscous mucus adhered to the walls of the ileum, which is congruent with this diagnosis. Two enemas were instilled and a nasogastric tube management was started with N-acetylcysteine and Gastrografin® but there was no improvement. Consequently, the case was considered as refractory to conventional medical treatment and double-balloon enteroscopy was performed. During enteroscopy, the proximal 150 cm of the ileum was examined, abundant solid mucus obstructing the lumen was found and the intestinal mucosa was adhered to this mucus. The area was irrigated exhaustively with a total of 250 ml of Gastrografin® diluted in 2,500 ml of sterile water until the mucus detached from the mucosa and distention of the intestinal lumen was observed (Fig. 1). No complications were observed. The evolution of the patient was satisfactory, with the resolution of both the gastrointestinal symptoms and the obstructive pattern.

Discussion

Approximately 20% of patients with cystic fibrosis undergoing lung transplantation will develop DIOS (1,2). The majority of DIOS cases respond adequately to medical treatment with osmotic laxatives, hydration, pancreatic enzymes and oral or rectal Gastrografin®. Surgical treatment is reserved for refractory cases (3-5). Decompression and the evacuation of fecal matter with Gastrografin® under direct visualization by enteroscopy could be considered in cases refractory to medical treatment, as this procedure allows the complete visualization of the gastrointestinal tract and has a low morbidity and mortality.

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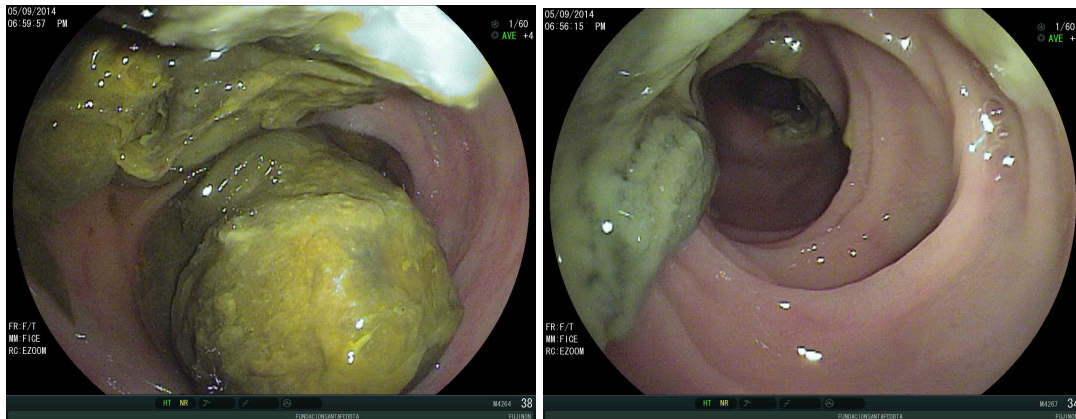


Fig. 1. Double-balloon enteroscopy. A. Mucoïd material adhered to the ileum, producing lumen obstruction. B. Permeabilization of the intestinal lumen in Gastrografin® irrigation of the posterior distal ileum.