

IMAGES IN GASTROENTEROLOGY AND HEPATOLOGY

Colonic migration of a percutaneous endoscopic gastrostomy with jejunal extension

Migração de Gastrostomia Endoscópica Percutânea com prolongamento jejunal para o colon

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Case description

A 67 years-old man, with a medical history of Parkinson's disease, was under Duodopa, Abbott (levodopa 20 mg/mL and carbidopa 5 mg/mL intestinal gel) through a percutaneous endoscopic gastrostomy with jejunal extension (PEG-J) placed in 2010, with excellent response to treatment. An X-ray was performed in early 2011 for other reasons and showed appropriate location of the jejunal extension.

He was referred to the gastroenterology clinic in January 2012 because of rectal bleeding. He also noticed that Duodopa was recently losing efficacy, and symptoms of Parkinson's disease were recurring. No other symptoms were referred, namely pain, diarrhoea, weight loss or stoma discharge.

We performed a colonoscopy that showed a polypoid mass in the sigmoid (adenocarcinoma on histological examination) and a tube in transverse and ascending colon (Figs. 1 and 2).

A CT-scan was performed for staging, which demonstrated that the entire extension of PEG-J was in the colon (Figs. 3 and 4), and that the anterior gastric body wall

was thinner than normal. On esophagogastroduodenoscopy (EGD), a depression was found in the corresponding location.

The patient underwent a left hemicolectomy, and PEG-J was surgically removed from the colon.

Discussion

Comparing to a regular PEG, direct jejunal feeding is more indicated in patients with chronic aspiration of gastric contents, in those needing concomitant gastric decompression or for administration of drugs that must be directly delivered to duodenum or jejunum to achieve a more precise and controlled absorption. In this setting, PEG-J is more often performed than direct percutaneous endoscopic jejunostomy, despite the risk of tube dysfunction or dislocation in the former technique.^{1,2}

Migration of a PEG to the colon is an infrequent but described long-term complication.^{3,4} The underlying cause can be related to iatrogenic puncture of the colon when the initial procedure for PEG insertion is performed. Then, the excessive tension that is applied on the gastrostomy tube can induce the migration of the bumper from the stomach to the colon through the iatrogenic gastrocolic fistula. The presence of post-surgical adhesions, a high-riding transverse colon and stomach over-distension during EGD for PEG placement are known predisposing risk factors.⁵ However, this is the first report of a complete colonic migration of a

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Figure 1 Endoscopic image of the PEG-J internal bumper in the colon.

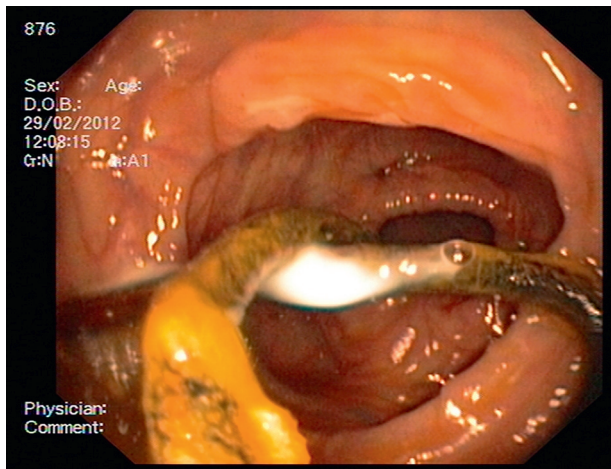


Figure 2 Endoscopic image of the PEG jejunal extension in the lumen of the colon.

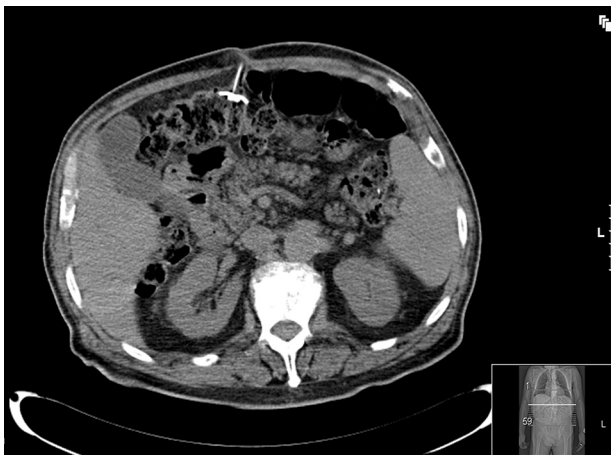


Figure 3 CT-scan image showing internal bumper in the colon.

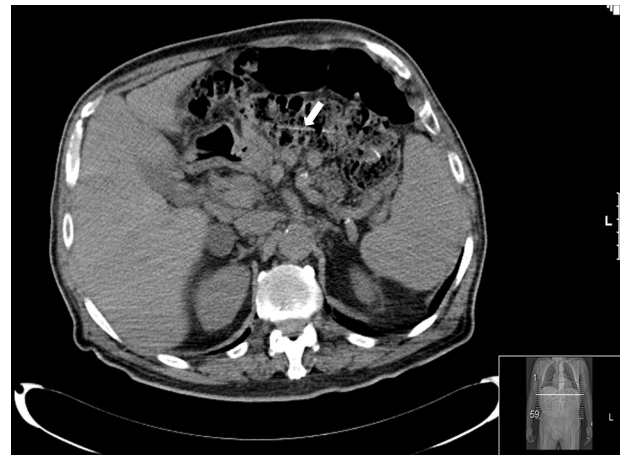


Figure 4 CT-scan image showing PEG jejunal extension in the transverse colon.

PEG-J: the internal bumper migrated to the colon and its jejunal extension was completely pulled behind probably due to peristaltic movements.

These patients with colocolic fistula may have no symptoms, as observed in our case. In the other hand, they can present subacute diarrhoea, cramping, odorous faecal leakage from the stoma or undigested food in the tube when there is a concomitant residual gastrocolic fistula.^{3,5} Treatment can be conservative in most patients and consists of endoscopic removal of the PEG, with spontaneous closure of the colocolic fistula within days. In patients with peritonitis, laparotomy must be considered. Concerning our patient, surgical removal was performed due to the appropriate management of the adenocarcinoma of the colon.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that no patient data appear in this article.

Right to privacy and informed consent. The authors declare that no patient data appear in this article.

Conflicts of interest

The authors have no conflicts of interest to declare.

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