JGH Open Open Access An open access journal of gastroenterology and hepatology

JGHF Journal of Gastroenterology and Hepatology Foundation

doi:10.1002/jgh3.12155

CASE REPORT

Uncommon complication of feeding jejunostomy: A case report

Tony Basil, Sudharsanan Sundaramurthi, Shankar Huthalm, Anuj Goyal, Shanmugam Dasarathan and Kadambari Dharanipragada

Department of Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry, India

Key words
computed tomography scan, conservative management, dysphagia, enteral feeding, internal dislodgement, small bowel obstruction.

Accepted for publication 14 January 2019.

Correspondence
Dr Sudharsanan Sundaramurthi, Department of Surgery, Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry 605006, India.
Email: sudharsanans4@gmail.com

Declaration of conflict of interest: None.

Abstract

Feeding jejunostomy is a common surgical procedure performed for patients who cannot take oral feeds. Although a minor procedure, it is not without complications. However, distal migration of the tube into the bowel is extremely rare. A 50-year-old woman with corrosive stricture of the esophagus because of feeding jejunostomy feeds presented with internal dislodgement of the feeding tube. Abdominal X-ray and ultrasonogram could not locate the tube. On computed tomography, the feeding tube was found in the descending colon. She was managed conservatively, and the tube was expelled after three days. Internal dislodgement of tube usually does not produce any symptom. Computed tomography (CT) scan is diagnostic.

Introduction

Enteral feeding procedures are commonly considered in patients who cannot take oral feeds. Dysphagia due to various reasons, such as malignancy of the upper aerodigestive tract, postcorrosive stricture etc., are common indications for the procedure. Commonly performed feeding procedures are feeding gastrostomy and jejunostomy.[1] Infant feeding tube, Ryles tube, Foley's catheter, etc. can be used as the tube for feeding procedures. Although this is a simple surgical procedure, several complications have been reported. The distal migration of the self-retaining, double-lumen Foley's catheter used as a feeding tube is a rare occurrence. One such rare complication encountered by us is presented here.

Case report

A 50-year-old woman with post-acid-corrosive stricture of the esophagus on feeding jejunostomy feeds presented to our surgical casualty with internal dislodgement of the feeding tube. She did not have any other symptoms. On examination, she was comfortable and hemodynamically stable. The abdomen was soft, and a small fistulous opening was noted on the left side of the abdomen without any active discharge from the wound. Initial radiological imaging with X-rays and ultrasonogram was apparently normal. A noncontrast, computed tomogram was decided on as the patient's history was highly suspicious for a distal migration. Computed tomography (CT) abdomen showed a hypodense linear structure extending from the distal descending colon till splenic flexure with a bulb-like dilatation toward the end, suggestive of the migrated Foley's catheter (Fig. 1). As the patient did not have any acute signs, she was managed conservatively and was observed for any features of acute intestinal obstruction or volvulus. Three days later, she passed the catheter along with stool. Another feeding jejunostomy was performed through the same fistulous tract to put her back on enteral feeds. She tolerated the feeds well and was discharged from the hospital.

Discussion

Generally, enteral nutrition is preferred over parenteral nutrition to preserve gut integrity and also to avoid complications associated with central line and parenteral nutrition.[2] The feeding procedure is associated with several complications. Tubes becoming blocked or kinked, development of surrounding skin excoriations, diarrhea, and even intussusceptions have been reported.[3] Complete internal migration of the feeding tube is an extremely rare complication. Internal migration can present with features of intestinal obstruction. Laxatives may be helpful in asymptomatic patients when the tube is in the colon, whereas if the tube is in the small bowel, laxatives may promote coiling of the tube and lead to intestinal obstruction and are better avoided. In patients with obstruction or intussusception, emergency surgical intervention is warranted.[4]

Common feeding tubes used include Ryles tube, infant feeding tube, Malecot catheter, Foley's catheter, etc. In our patient, a double-lumen Foley's catheter was used, which differs

Figure 1 Computed tomography scan, coronal section showing Foley's catheter in the descending colon with its bulb in the splenic flexure.

from other catheters in that it has a balloon at the distal end that can be inflated after placement. This inflated balloon prevents the outward migration of the tube. At the same time, it can be a cause for some complications like bowel obstruction and intussusception. A hyperperistaltic small bowel can push the balloon distally, eventually causing complete internal migration of the tube. The presence of the balloon explains the internal migration of Foley's catheter, although internal migration can occur with other tubes. Foley's catheter is also associated with balloon rupture in the bowel, which leads to external migration if improperly fixed.[4]

In 2003, Polychronidis *et al*. from Greece reported the internal migration of a Malecot catheter, which the patient passed along with feces on the 5th day after admission. The patient was discharged with a new tube in the matured tract.[5] Rashid and Asif, in 2015, reported a displaced Foley's tube causing intestinal obstruction, and the patient required a laparotomy.[4]

These complications can be avoided by proper fixation of the feeding tube to the bowel, parietal wall, and to the skin. Continuous education about the importance of serial measurements of the external tube length, dislodgement of the tube, and peritubal leak will prevent most of these unwanted complications, thereby improving the quality of life in these patients.

References

1 Blumenstein I, Shastri YM, Stein J. Gastroenteric tube feeding: techniques, problems and solutions. *World J. Gastroenterol.* 2014; **20**: 8505–24.
2 Seres DS, Valcarcel M, Guillaume A. Advantages of enteral nutrition over parenteral nutrition. *Therap. Adv. Gastroenterol.* 2013; **6**: 157–67.
3 Choi AH, O'Leary MP, Merchant SJ *et al*. Complications of feeding jejunostomy tubes in patients with gastroesophageal cancer. *J. Gastrointest. Surg.* 2017; **21**: 259–65.
4 Rashid K, Asif M. Complete impulsive migration of feeding jejunostomy tube and jejunal intussusception – Sporadic complications of a common procedure. *J. Coll. Physicians Surg. Pak.* 2016; **26** (6 Suppl.): S21–3.
5 Polychronidis A, Karayiannakis AJ, Perente S, Botaitis S, Simopoulos C. Enteral migration of a Pezzer tube after a feeding jejunostomy: report of a case. *Surg. Today*. 2003; **33**: 620–2.