Images

A wandering tube

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ABSTRACT

The predominant causes of acute mechanical small bowel obstruction in geriatric patients are adhesions and hernias, which is not much different than in other adult age groups. Unusual etiologies may be encountered, such as volvulus or gallstone ileus, but a displaced feeding gastrostomy tube is a distinctly rare cause of intestinal obstruction which needs to be considered by emergency physicians as it may be increasingly encountered.

RÉSUMÉ

Les principales causes d'obstruction aiguë, d'origine mécanique, de l'intestin grêle chez les personnes âgées sont les adhérences et les hernies, ce qui ressemble passablement aux causes observées dans les autres groupes d'adultes. Parmi les causes peu courantes d'obstruction intestinale, il y a le volvulus et l'iléus biliaire, mais le déplacement d'une sonde de gastrostomie pour gavage est tout particulièrement rare; pourtant, les médecins d'urgence devraient envisager cette possibilité, la cause étant susceptible de devenir de plus en plus fréquente.

Keywords: Dementia, feeding in, Percutaneous endoscopic gastrostomy, Small bowel obstruction, mechanical

CASE STUDY

A 94-year-old woman with a history of advanced dementia presented to the emergency department (ED) from her nursing home with a urinary tract infection (UTI) and abdominal pain. On presentation, her vital signs were normal, but mild abdominal distention was found and she vomited once. Her past medical history was also significant for hiatal hernia, bilateral hip fractures five years prior, permanent urinary catheter, and recurrent UTIs. She was on no medications. Although the referral letter said she was being fed by percutaneous endoscopic gastrostomy (PEG) tube, the ED team noted immediately that no tube could be found. Plain flat x-ray revealed partial small bowel obstruction, but the tube could not be visualized. An urgent CT was ordered which identified the inflated balloon and indicating its position in the terminal ileum (Figure 1). The patient was admitted. A percutaneous needle puncture of the balloon failed. Laparotomy was refused by the patient's substitute decision-maker. She died a few days later.

DISCUSSION

PEG is being increasingly used to provide nutrition and fluid balance in patients who cannot eat or refuse to eat, although it has not been shown to prolong survival in elderly patients with advanced dementia.[1,2] Late complications include local infections, aspiration

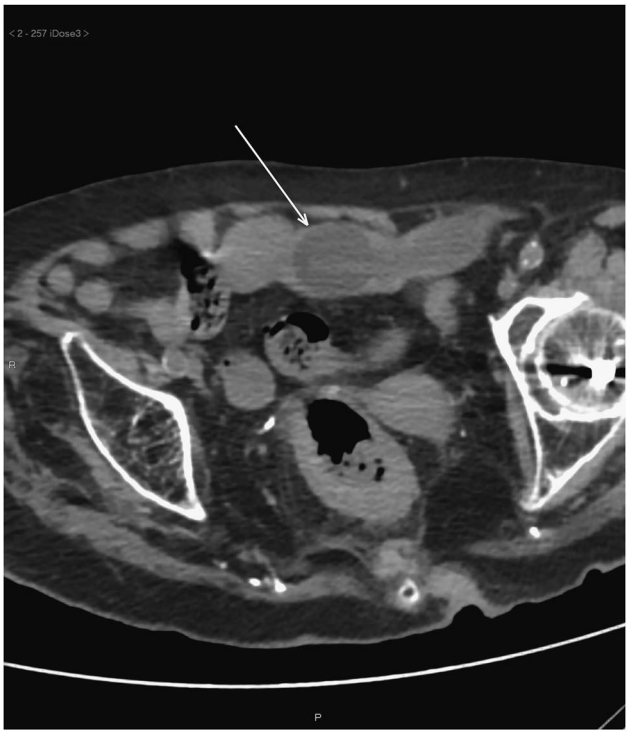

Figure 1. Single axial image of abdominal CT scan without contrast demonstrating an inflated Foley catheter (arrow) lodged in the terminal ileum. Proximal to it, moderate bowel loop dilatation was present (not shown).

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pneumonia, and tube dislodgement with sliding either out of (common) or into (rare) the gastrointestinal tract.[3] When the external bolster moves inward, migration of the tube to the pyloric area can cause gastric outlet obstruction,[3] but migration into the small bowel or transverse colon has also been reported with life-threatening obstruction or fistula formation.[4] Since gastrostomy tubes are expensive, their replacement by a Foley catheter when expelled or malfunctioning has become prevalent.[5] We found no relevant statistics, but a current review of published literature (PubMed since inception, using "foley catheter" AND gastrostomy) revealed 38 publications in the English language which indicate that Foley catheters were being used worldwide as temporary gastrostomy tubes and that their use for prolonged periods (median 15 months) was acceptable and cost-effective.[6] Short-term trials of Foley catheters have yielded safety data comparable to commercial gastrostomy tubes[5], but our patient case is a reminder of the ease of a catheter being "swallowed" unless properly cared for and fixated, and the need for emergency physicians to be aware of these potential complications which may not be apparent on presentation and to also consider "wandering" tube in the differential diagnosis of obstruction or ileus in the elderly.

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