Small Bowel Volvulus around PEG Tube

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INTRODUCTION

Percutaneous endoscopic gastrostomy (PEG) tube placement is a common procedure with possible rare but serious complications. Common complications include wound infection, tube dislodgement or blockage, hernia or fistula formation, ulceration and granuloma formation. Rare but more serious complications are injury to internal organs, buried bumper syndrome, necrotizing fasciitis, and volvulus. Of reported PEG tube associated volvulus complications, many are seen months to years after placement. We present a unique case of small bowel volvulus around a PEG tube manifesting as early as post-operative day two.

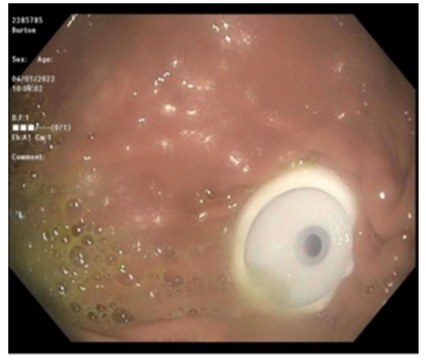
CASE DESCRIPTION

This was a 77-year-old male admitted from a nursing facility for metabolic encephalopathy and failure to thrive due to dysphagia, which was not explained by any esophageal abnormality. Due to ongoing severe protein calorie malnutrition, the patient had a percutaneous endoscopic gastrostomy (PEG) tube placed by the gastroenterologist. General surgery was consulted on post-procedure day two of PEG placement due to new onset abdominal tenderness to palpation. A computerized tomography (CT) of the abdomen and pelvis showed the PEG tube in the posterior wall of the stomach without any extravasation of oral contrast.

The patient developed worsening leukocytosis, tachycardia, and unresolved lactic acidosis. He was therefore quickly taken for exploratory laparotomy with the finding that the gastrostomy tube traversed the mesentery of the small bowel, inferior to the transverse colon, and terminated with the tube inside the edge of the greater curvature of the stomach about 5cm from the pylorus with no dislodgement. The course of the tubing caused a small bowel volvulus around the gastrostomy tube. The PEG tube was removed and a new Stamm 22Fr gastrostomy tube was placed. The patient recovered uneventfully and was eventually discharged to a long-term rehabilitation facility. Early recognition of the severity of the patient's presentation contributed to his eventual recovery and discharge.

DISCUSSION

PEG tube placement is one of the safest procedures, with low rates of mortality and morbidity. The overall complication rate varies between 4 and 23%, with most of the complications being minor. Usually, post-PEG pneumoperitoneum can be benign and self-limited, with spontaneous and quick recovery. Abdominal pain and non-resolving lactic acid levels peri-PEG placement should raise suspicion for PEG complication. Awareness and early recognition of this potential complication of this commonly performed procedure is prudent and essential.







	WBC	Lactate
Initial evaluation	13.6	2.2
Five hours later	--	2.6
Seven hours later	29	3.0

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