Open Journal of Clinical & Medical Images

www.jclinmedimages.org

Clinical Image

Open Access, Volume 2

A rare cause of GI bleed

Hassan Ghoz, MD[1]; Marilia L Montenegro, MD[1]; Suryansh Bajaj, MD[2]; Yan Bi, MD, PhD[1]*

[1]Division of Gastroenterology and Hepatology, Mayo Clinic, Jacksonville FL 32224, USA.

[2]Department of Radiology, Yale School of Medicine, New Haven CT 06510, USA.

***Corresponding Author: Yan Bi**

Division of Gastroenterology and Hepatology, Mayo Clinic, 4500 San Pablo Road Jacksonville, FL 32224, USA.

Email: Bi.yan@mayo.edu

Received: Feb 14, 2022

Accepted: Mar 22, 2022

Published: Mar 28, 2022

Archived: www.jclinmedimages.org

Abstract

A 67-year-old female with a history of pancreatic cancer with gastric outlet presented with maroon-colored bleeding from the percutaneous endoscopic gastrostomy (PEG) tube for 1 day. On examination, necrotic tissue with surrounding cellulitis was noticed around the PEG tube insertion site, and the internal bumper of the tube was palpated superficially under the skin. Imaging demonstrated an abnormally migrated bumper just beneath the skin. Buried bumper syndrome is a rare complication of in situ PEG tube, and in this article, we present the clinical images of a patient and discuss briefly the risk factors, diagnosis, and management of the condition.

***Keywords*:** Buried bumper syndrome; Peg tube; GI bleed.

Description

A 67-year-old Caucasian female complained about marron-colored bleeding from the PEG tube for one day. The patient had a history of pancreatic cancer with gastric outlet obstruction status post-chemo-radiation therapy and pancreaticoduodenectomy. Venting G tube was placed for pleasure eating and J tube for nutrition one month prior to admission. One day before admission, she reported marron-colored output from the venting G tube. Physical examination revealed necrotic tissue around the PEG tube with surrounding cellulitis. Internal bumper of the PEG tube was palpable just below the skin (Figure 1). Lab work was significant for anemia but no leukocytosis. CT abdomen showed migration of the gastrostomy tube bumper along its tract with associated adjacent cellulitis, fasciitis, and necrosis of the anterior gastric wall (Figures 2A and B).

Buried bumper syndrome, first described in 1988 [1], is a rare (about 1%) but severe, late complication of PEG placement when the internal fixation device (bumper) erodes into the gastric wall leading to ischemic necrosis and migrates alongside the stoma tract outside the stomach. It can range from the mildest form with hyperplastic tissue overgrowth over the edge of the disc to complete dislocation of the PEG tube with the bumper. It has been proposed that excessive pressure of tissue between the external and internal fixation device is the main reason for buried bumper syndrome development. Typical triad of the buried bumper syndrome includes an inability to insert, loss of patency, and leakage around the PEG tube [1]. Patients with malignancy, poor nutrition, on treatment with steroids and chemotherapy, rapid weight gain, constant pulling of the PEG tube externally, gauze placement underneath the bumper are at risk of buried bumper syndrome development. Rigid and round bumper and PEG with jejunal extension also increase the risk.

Diagnosis of the buried bumper syndrome is clinical, and the degree of disc migration can be estimated by endoscopic, ultrasound, or CT scan and is critical for treatment selection, which includes conservative cut and leave, endoscopic extraction, and surgery [2]. For our patient, due to the location of the bumper being just below the skin, surgery was consulted to remove the bumper. Techniques to prevent buried bumper syndrome have been suggested which include allowing for an additional 1.5–2 cm between the external bumper and the skin, daily gently rotating and manipulating the PEG, and daily monitoring of the bumper mark to recognize early migration.

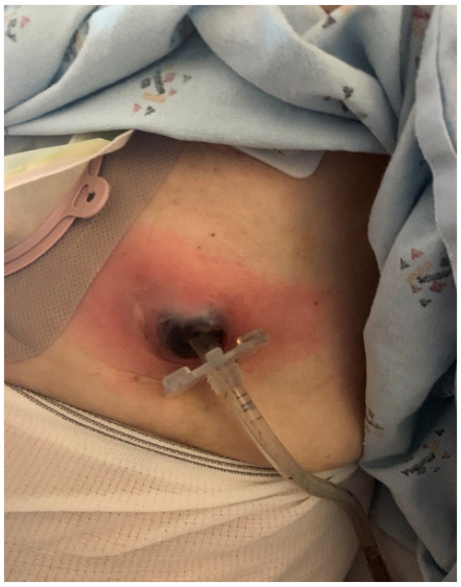

Figure 1: Buried bumper syndrome. External view demonstrates necrotic tissue around PEG tune with surrounding cellulitis and induration.

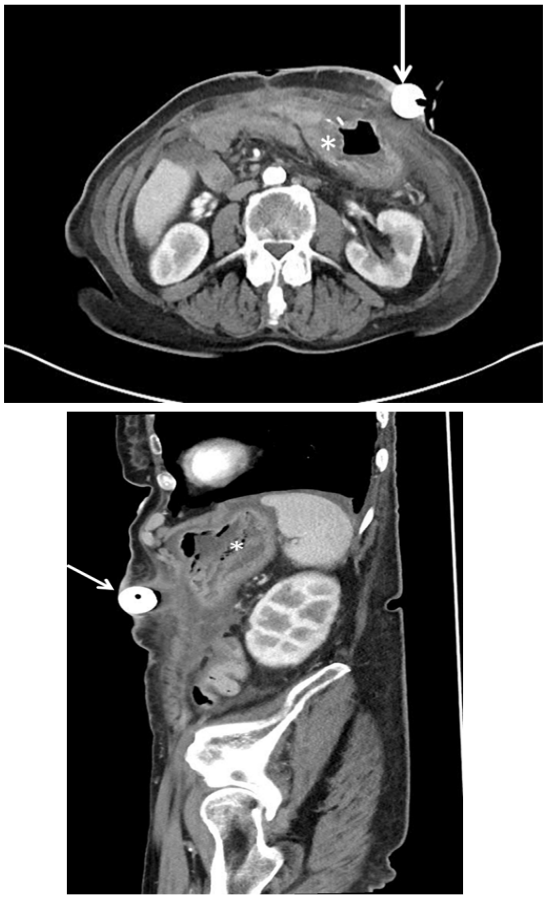

Figure 2 A and B : Buried bumper syndrome A)Axial CT of the abdomen demonstrating a migrated PEG internal bumper (arrow) outside stomach (*) into subcutaneous with associated inflammation along the tract. B) Oblique sagittal reformation demonstrating a migrated PEG internal bumper (arrow) outside stomach (*).

References

1. Schwartz HI, et al. PEG feeding tube migration impaction in the abdominal wall. Gastrointest Endosc. 1989; 35(2): 134.

2. Cyrany J, et al., Buried bumper syndrome: A complication of percutaneous endoscopic gastrostomy. World Journal of Gastroenterology. 2016; 22(2): 618-627.