

Endoscopic treatment of transcolonic misplacement of a percutaneous endoscopic gastrostomy tube



Fig. 1 Percutaneous endoscopic gastrostomy (PEG) tube traversing the sigmoid at 40 cm from the anus.

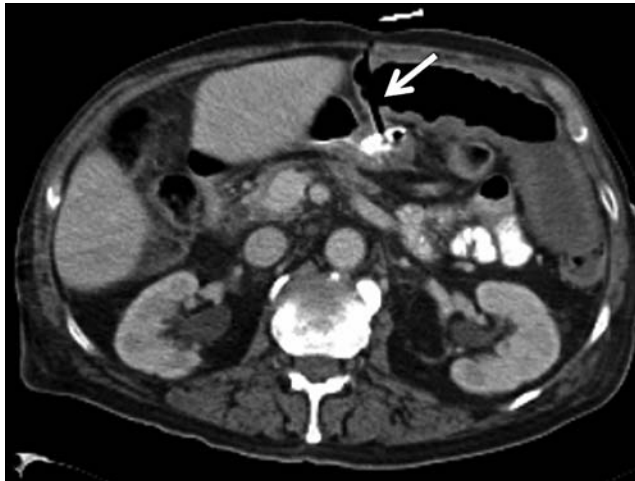


Fig. 3 Computed tomography scan of the abdomen confirming the PEG tube running through the colon, with the internal bumper correctly lying within the stomach.



Fig. 2 Abdominal transillumination at the site of the PEG entry.

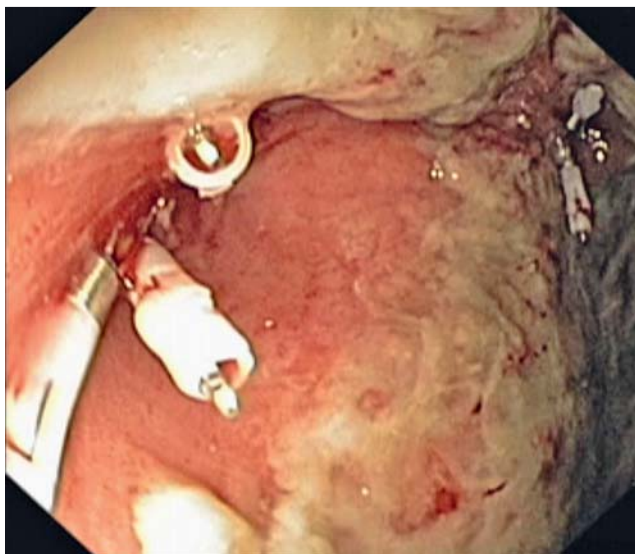


Fig. 4 Endoscopic closure of the colonic perforations with clips.

An 80-year-old man, who had received a percutaneous endoscopic gastrostomy (PEG) tube 5 months earlier, was referred to our institution for further evaluation of bloody diarrhea. Physical examination revealed a reduced level of consciousness and left-sided abdominal tenderness. Endoscopy demonstrated inflamed, edematous and partly necrotic colonic mucosa consistent with ischemic colitis. To our surprise, a PEG tube traversing the sigmoid at 40 cm from the anus was seen (▶ **Fig. 1**) with abdominal transillumination at the site of PEG entry (▶ **Fig. 2**). A computed tomography (CT) scan of the abdomen confirmed the PEG tube running through the colon with the internal bumper correctly lying within the stomach (▶ **Fig. 3**). In addition, thickening of the left-sided colonic wall was demonstrated. Three days later and after initiation of antibiotic therapy,

colonoscopy and gastroscopy were performed to remove the misplaced PEG tube (▶ **Video 1**). The PEG tube was gastroscopically retrieved with a snare. The removal was simultaneously observed with the colonoscope, and endoscopic clips were immediately placed to close the colonic perforations (▶ **Fig. 4**). Clips were also applied to close the gastric perforation from within the stomach. Leak testing

Video 1

Removal of the misplaced PEG tube under colonoscopic observation and endoscopic closure of the gastrocolonic and colocolic fistulas with clips.

with air and methylene blue injections through the colonoscope confirmed complete closures of the gastrocolic and colocolic fistulas, respectively. Finally, a new PEG tube was introduced using the pull technique following positive transillumination. The patient recovered rapidly and could be discharged on hospital day 7. Gastrocolonic fistula after PEG tube placement is an uncommon but serious complication. There are several case reports on the closure of such fistulas by surgery, fibrin glue [1] or septal repair implants [2]. In the present case, we could successfully close the fistula by placement of multiple clips immediately after retrieval of the PEG tube. Of interest here is that

the occurrence of ischemic colitis led to the detection of the misplaced PEG tube. Hence, one might speculate that this condition was related to the tight fixation of the sigma in the upper abdomen caused by the transcolonic PEG misplacement.

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Bibliography

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