A pseudopyloric channel created by repeated blind post-pyloric feeding tube placement

A 58-year-old man with esophageal cancer underwent a transhiatal esophagectomy and presented to the surgical intensive care unit (SICU) with progressively worsening shortness of breath 14 days after his surgery. The patient was found to have a left empyema, possibly from an anastomotic leak, and underwent a left video-assisted thoracotomy (VATS) decontamination and empyema drainage, and endoscopic placement of two tandem fully covered esophageal stents. While recovering in the SICU, the patient had multiple episodes of agitation that resulted in his pulling out his post-pyloric feeding tube. The tube was reinserted blindly at the bedside multiple times without any obvious difficulty or complications. On one occasion, after the patient had pulled out his nasojejunal feeding tube, the tip of the tube was noted to be missing and subsequent radiographs showed that it had likely caught on one of the esophageal stents. The patient underwent endoscopy to retrieve this retained segment and for endoscopic placement of a new feeding tube. During this endoscopy, it was noted that a false tract had been created through the muscle of the pylorus, probably from a forced feeding tube insertion (Fig. 1).

Insertion of post-pyloric feeding tubes has been associated with various complications, including but not limited to bleeding [1], injury to the soft tissue in the nasopharynx and pharynx [2], esophageal and enteric perforations [3, 4], and malposition into the lungs and brain [5]. A satisfactory position on a portable bedside radiograph of the abdomen usually convincingly rules out malposition.

We describe an incidentally detected complication of post-pyloric tube placement, wherein a false tract in the form of a pseudopyloric channel was created, presumably from multiple attempts at feeding tube placement, though it is unclear when creation of the false tract might have occurred. To our knowledge, such a complication of blind post-pyloric feeding tube placement has not previously been described in the literature.

Competing interests: None

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References

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Fig. 1 Endoscopic views in an intensive care unit patient who had undergone multiple blind insertions of a post-pyloric feeding tube showing: a a pseudopyloric channel adjacent to the pylorus; b the pseudopyloric channel with a Jagwire positioned to demonstrate the through-and-through pyloric disruption.