AN ALTERNATIVE TECHNIQUE FOR PREVENTING STENT MIGRATION IN ESOPHAGOJEJUNAL ANASTOMOTIC LEAKAGE FOLLOWING GASTRIC CANCER SURGERY.

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Background

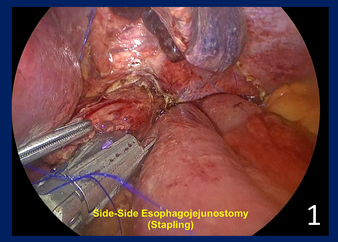
Esophago-jejunostomy anastomosis leakage is a major complication after radical gastrectomy, with increased mortality rates and prolonged hospital stay after surgery. Endoscopic placement of self-expandable metallic esophageal stent has become the preferred primary treatment but complications may occur including stent migration. We present an alternative technique for the prevention of stent migration.

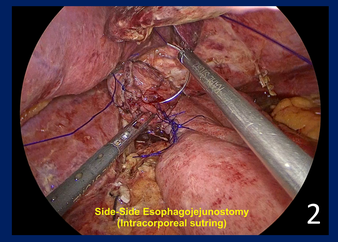
Case Presentation

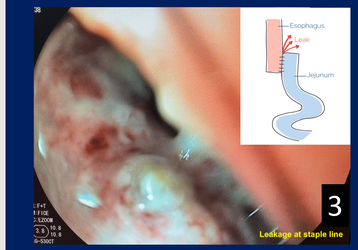
A 45-year-old-female with a BMI of 35 had a proximal gastric adenocarcinoma. The patient underwent laparoscopic total gastrectomy with D2 lymphadenectomy and cholecystectomy. The esophagojejunostomy was performed using linear-stapled side-to-side with hand-sewn closure of the enterotomy(Fig. 1,2)

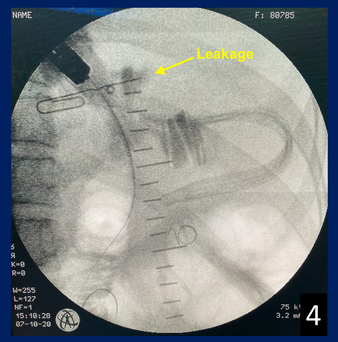
On the 5th postoperative day, the patient began with fever and tachypnea accompanied by left pleural effusion. A chest drain was inserted. CT scan was performed, which suspected esophageal-jejunal anastomotic leakage. Esophagoscope found leakage at the staple line(Fig. 3,4). The fully covered self-expanding metallic esophageal stent was placed and fixed to esophageal mucosa with clips(Fig. 5,6). Follow up chest XRAY on day 1 showed distal migration of the stent to the jejunum(Fig. 7). The endoscopic reposition of the stent was performed. To prevent stent migration, a nylon thread was passed through the lasso at the proximal, tied this thread to small gauze, and fixed to the patient face with adhesive film(Fig. 8,9,10,11).

Parenteral nutrition was administered. The stent was removed after 6 weeks of placement, proving the absence of a residual fistula and initiating oral nutrition. The patient was recovered and discharged from the hospital.

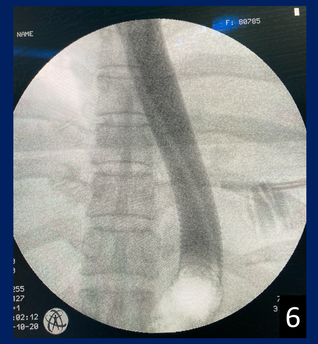


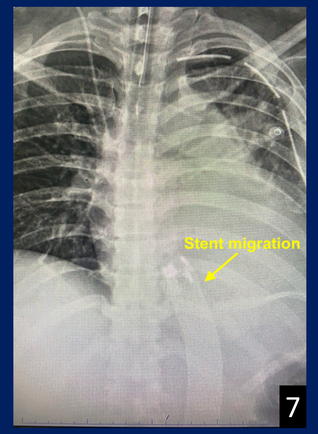


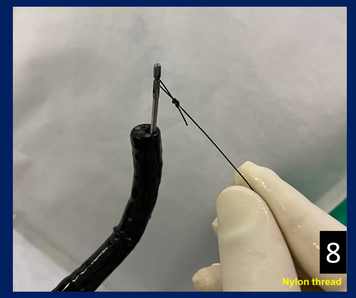


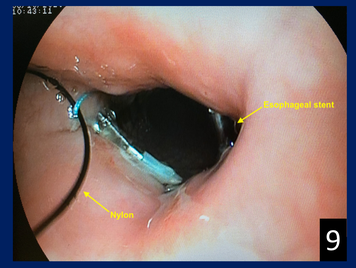




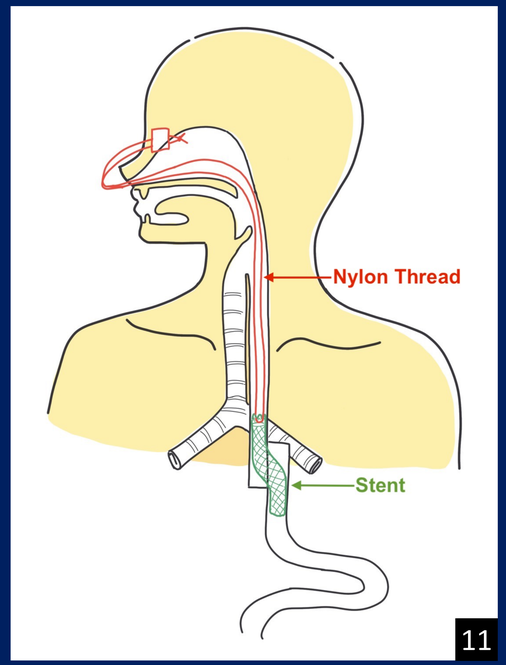












Discussion

The use of fully covered self-expanding metallic esophageal stent for esophagojejunal anastomotic leakage is associated with high rates of migration.

Various methods were investigated for preventing stent migration such as over-the-scope clipping devices or endoscopic suturing. But some instruments may not be routinely available.

Our experience suggests the external fixation using nylon thread is a simple and inexpensive method for the prevention of esophageal stent migration.