Polyglycolic acid sheets with fibrin glue can prevent esophageal stricture after endoscopic submucosal dissection.

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Abstract:

Background and study aims: Suitable techniques for the prevention of stricture formation after esophageal endoscopic submucosal dissection (ESD) are still lacking. We investigated the efficacy of polyglycolic acid (PGA) sheets with fibrin glue to prevent post-ESD stricture. Patients and methods: We conducted a pilot study on a total of eight consecutive patients who underwent esophageal ESD that left a mucosal defect of more than three-quarters of the esophageal circumference. PGA sheets were attached to the defect with fibrin glue immediately after the completion of ESD. The primary endpoint was the incidence of post-ESD stricture. The secondary endpoints were the number of sessions of endoscopic balloon dilation (EBD) required to resolve any stricture and the rate of complications. Results: There were no adverse events related to the use of PGA sheets and fibrin glue. Post-ESD stricture occurred in 37.5 of the subjects and 0.8 +/- 1.2 sessions of EBD were required. Conclusion: The use of PGA sheets and fibrin glue after esophageal ESD is a novel method that radically decreases the incidence of esophageal stricture and the number of EBD sessions subsequently required. University Hospital Medical Network Clinical Trial Registry (UMIN000011058).