Filling and shielding for postoperative gastric perforations of endoscopic submucosal dissection using polyglycolic acid sheets and fibrin glue.

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Abstract:

Background and study aims: Many medical institutions in Japan perform endoscopic mucosal dissection (ESD) to treat early gastric cancer. Perforations can occur during ESD, and clipping has been reported as useful for treating small pinhole perforations. However, it is often difficult to close postoperative perforations because they usually have large diameters, and the muscle layer around the perforated region is often fragile, so additional open surgery is the only currently used method to treat large perforations and delayed perforations. Another method for large perforation is needed to treat perforations endoscopically. Ono et al. reported a case in which a postoperative perforation was closed using a polyglycolic acid (PGA) sheet and fibrin glue. In addition, it has been used by the authors' group to repair duodenal injuries that occur during ESD. We report 3 cases in which PGA sheets and fibrin glue were successfully used to repair postoperative gastric perforations endoscopically. This method is simple, safe, and effective, and is a new way to treat large perforations and delayed perforations that occur following ESD.