

Polyglycolic acid sheets with fibrin glue can reduce the risk of bleeding after gastric endoscopic submucosal dissection for patients continuing antithrombotic therapy.

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Abstract:

Background and Aim: The number of patients taking antithrombotic agents has increased as a result of increases in the incidence of ischemic heart disease and cerebrovascular disease. Recently, Japanese guidelines have been changed to emphasize the risk of thromboembolism caused by cessation of antithrombotic therapy rather than bleeding during the periendoscopic period¹. Consequently, the increase in the risk of bleeding after endoscopic submucosal dissection (ESD) is a concern for patients continuing antithrombotic therapy. This study aimed to clarify the efficacy of the endoscopic tissue shielding method using polyglycolic acid (PGA) sheets and fibrin glue to prevent post-ESD bleeding in patients continuing antithrombotic therapy.

Patients and Methods: A total of 84 consecutive patients with 105 gastric neoplasms who were treated by ESD under continued antithrombotic therapy at Shizuoka Cancer Center between April 2014 and September 2015 were enrolled in this study. The patients were classified into two groups: ESD with PGA sheets fixed on the mucosal defect using fibrin glue immediately after the ESD procedure (PGA group, 38 patients with 52 lesions), and ESD without PGA sheets (control group, 46 patients with 53 lesions). Post-ESD bleeding rates in the two groups were then compared.

Results: The percentage of patients taking multiple antithrombotic agents was significantly higher in the PGA group than in the control group (21% and 7%, respectively). No significant differences were seen in lesion location, median procedure time, median resected specimen size, and en bloc resection rate between the

groups (Table). The median procedural time for applying PGA sheets and fibrin glue was 15 min (range, 3-50 min) in the PGA group. Post-ESD bleeding occurred in 5% (3/52) of lesions in the PGA group and 21% (11/53) of lesions in the control group. There was a significant difference in the post-ESD bleeding rate between the groups ($P = 0.04$). Of the 3 lesions with post-ESD bleeding in the PGA group, bleeding occurred within 24 hours after ESD in 1 lesion, and the next day's second-look endoscopy confirmed that PGA sheets had detached from an ESD ulcer in other 2 lesions. Conclusion: Use of PGA sheets with fibrin glue can reduce the risk of post-ESD bleeding for patients continuing antithrombotic therapy. (Table presented).