Role of fibrin glue spray in prevention of bleeding after gastric endoscopic submucosal dissection.

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Abstract:

Aims: This study was to evaluate the effectiveness of fibrin glue (FG) in preventing delayed bleeding after gastric endoscopic submucosal dissection (ESD). Methods: Four-hundred and twenty-three patients who underwent gastric ESD from 2011 to 2014 were studied retrospectively. After excluding 26 patients, the remaining 397 were enrolled into the study. The post-ESD wounds were treated with only coagrasper or clips at our center prior to April 2013. After that, additional fibrin glue spray was utilized as a mean of wound closure. Patients were divided into 2 groups, FG group (patients with post operative use of fibrin glue) and non-FG Group (patients without the use of fibrin glue). The post-ESD bleeding rates of each group were compared. Results: A total of 397 lesions were resected from the 397 patients; ESD was successfully completed in all patients. FG group were significantly consisted of more risk factors predispose to delayed bleeding, such as advanced age, larger specimen size, more cancerous lesions and longer operation time. There was no statistical significant difference in the gender, comorbidity, location of lesions, numbers of coagrasper, and hemoclips between the two groups. The total rate of delayed bleeding was 4.53% (18/397). There were 18 cases of delayed bleeding (5.98%) that occurred in the non-FG group, while there were none in the FG group (p = 0.03). Univariate analysis showed that the use of fibrin glue was associated with a significantly reduced risk of delayed bleeding (p = 0.03). Conclusions: The use of

fibrin glue after gastric ESD was a simple and promising method to prevent delayed bleeding.