

Efficacy of novel hemostatic adhesive powder in patients with upper gastrointestinal tumor bleeding

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Background/Aims: Gastrointestinal tumor bleeding remains a clinical challenge because it is difficult to treat with conventional endoscopic hemostatic options. Recently, an endoscopic hemostatic powder (UI-EWD) was developed and reported to provide effective control of upper gastrointestinal bleeding. The aim of current study was to evaluate the feasibility and efficacy of this novel hemostatic powder in tumor bleeding.

Methods: A total of 41 consecutive patients with upper gastrointestinal tumor bleeding were included. UI-EWD was applied in all patients as an auxiliary hemostatic method as a salvage therapy or monotherapy during endoscopic treatment. Hemostasis success rates, adverse event related to UI-EWD, and rates of re-bleeding were evaluated.

Results: In all cases, UI-EWD application was successful at tumor bleeding sites. Immediate hemostasis occurred in 40/41 (97.5%) patients, and re-bleeding within 28 days occurred in 10 of 40 (22.5%) patients that achieved initial hemostasis. The success rate of immediate hemostasis for UI-EWD monotherapy was 100% (23/23). The re-bleeding rate at 28 days after UI-EWD monotherapy was 26.1% (6/23). No adverse events associated with UI-EWD application were encountered

Conclusions: The success rate of UI-EWD for immediate hemostasis in cases of GI tumor bleeding was excellent and UI-EWD produced promising results with respect to the prevention of re-bleeding. Based on these results, we suggest that UI-EWD be considered an effective salvage therapy or even monotherapy for GI tumor bleeding.

Figure 1. Patient selection flowsheet

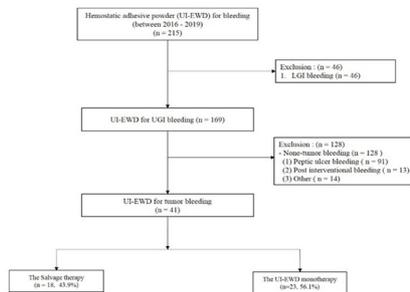


Figure 2. Images of UI-EWD (A) and spraying devices (B)

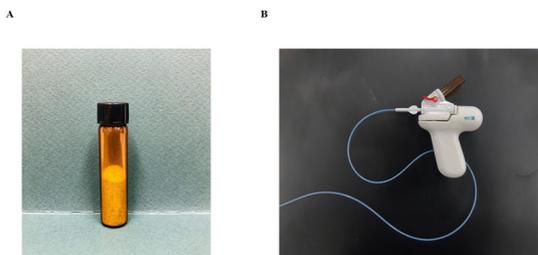


Figure 3. The endoscopic images of UI-EWD application for upper gastrointestinal tumor bleeding. (A) The patient had Forrest-Ib bleeding from gastric antrum due to advanced gastric cancer that could not be controlled by thermal therapy. (B) Application of UI-EWD at the bleeding site. (C) Five minutes after application, the UI-EWD was firmly attached at the tumor bleeding site without any sign of bleeding.

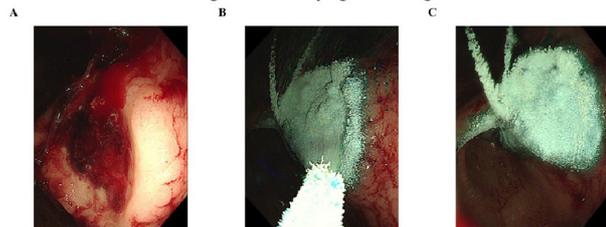


Figure 4. Overall re-bleeding rates at 28 (A) and 180 days (B) after the endoscopic procedure

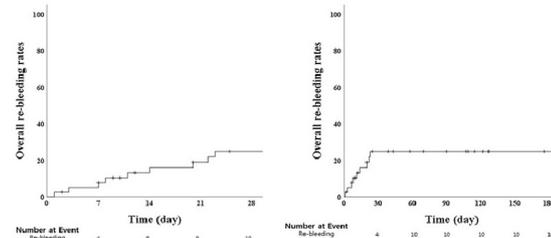


Figure 5. The cumulative survival rates (A) and the cumulative survival rates according to re-bleeding (B)

