LETTERS TO THE EDITOR

Ankaferd Blood Stopper in GI bleeding: alternative for everything?

To the Editor:

We read with great interest the article by Tuncer et al1 describing a case of fundal variceal hemorrhage that was managed with endoscopic administration of Ankaferd Blood Stopper (ABS). In the discussion section, they also claimed that ABS had an immediate hemostatic effect on arterial bleeding due to gastric polypectomy or spurting bleeding ulcers in cases not responsive to injection therapy or thermocoagulation. We would like to make some comments about their conclusions.

The successful use of ABS in mild to moderate GI bleeding cases is increasingly being reported.2-6 Its major advantages as a hemostatic agent are ease of use and no side effects. The rapid formation of a coagulum in a bleeding source just after spraying leads to an initial enthusiastic response for the endoscopist. However, in our experience, in addition to the current literature, it is only partially or not effective in severe or spurting arterial bleeding.

First, the cases cited by the authors related to ABS use2-4 could not establish a clear-cut diagnosis for severe or spurting bleeding—as an adjunct to clips in a Dieulafoy lesion,2 in a case of postbiopsy mucosal bleeding in a hepaticojejunal anastomosis,3 and in a mild bleeding caused by postpolypectomy. Moreover, we reported the limited effect of ABS in severe bleeding previously.5

Second, we observed the failure of hemostatic effect of ABS in 5 cases of severe arterial bleeding recently. The lesions were Forrest Ia spurting duodenal ulcers (n = 4) and a severe Mallory-Weiss tear (n = 1). ABS was selected as a therapeutic choice because of the inappropriateness of bleeding lesions for conventional measures (excessive cough by the patient with a Mallory-Weiss tear, difficulty in positioning, and/or excessive blood in visual field despite irrigation in the ulcer cases). For all patients, written informed consent regarding the off-label use of ABS as a means of attaining hemostasis had been obtained from the

Figure 1. A, Fresh oozing bleeding from a deep Mallory-Weiss lesion. B, Topical application of ABS via a sclerotherapy needle (B) caused yellowish-green coagulum covering the bleeding area. C, D, Bleeding lessened but not completely stopped.

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patients themselves or relatives. ABS application lessened but did not stop the bleeding in 2 patients (Fig. 1), whereas it had no effect in the remaining 3 patients. Thereafter, all the patients were managed with hemoclip application (Fig. 2), and 1 of them underwent surgery.

Third, the mechanism of the ABS effect is also not in accord with the authors’ conclusions. The basic mechanism of action of ABS is the formation of an encapsulated protein network that provides focal attachment points for very rapid vital erythrocyte aggregation like an “erythrocyte magnet,” which is known as the hemostatic ABS web. Thereafter, the ABS-induced protein network enriched with blood cells, particularly erythrocytes, covers the primary and secondary hemostatic system without disturbing individual coagulation factors or platelets.7,8 Based on this, the size of the defect on the bleeding vessel, the general hemostatic status, and the underlying illness should be the main determinants of success similar to other endoscopic measures. Moreover, arterial pressure and powerful blood flow do not permit ABS elements to last for a sufficient time to form a plug in severe or a spurting type of bleeding. On the other hand, the authors described the successful use of ABS in a case of fundal variceal bleeding. The low pressure in gastric varices compared to arterial lesions such as an ulcer bleeding and the histological differences of arterial versus venous vessels can be speculated for ABS effect in the authors’ presented case.

In conclusion, until there are results from prospective, randomized, controlled trials, the use of ABS for arterial GI bleeding should be restricted to mild to moderate cases in which conventional measures are inappropriate.

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Response (with video)

We appreciate the interest of Ozaslan et al in our case and would like to respond. Our case report was on fundal variceal bleeding. We did not state any conclusion regarding arterial bleeding or that Ankaferd Blood Stopper (ABS) will replace conventional treatment modalities for GI bleeding.1

We had 2 patients who experienced arterial bleeding immediately after gastric polypectomies. In both patients, the bleeding could not be controlled by sclerosing agent injection and thermal coagulation but responded to ABS application. A third patient had bulbus ulcer bleeding, and endoscopy revealed spurting hemorrhage after removing