

# TANDEM ORAL, RECTAL AND NASAL ADMINISTRATIONS OF ANKAFERD BLOOD STOPPER TO CONTROL PROFUSE BLEEDINGS LEADING TO HEMODYNAMIC INSTABILITY\*

Mevlut Kurt<sup>1</sup>, Erkin Oztas<sup>1</sup>, Sedef Kuran<sup>1</sup>, Ibrahim K. Onal<sup>1</sup>, Murat Kekilli<sup>1</sup>, Ibrahim C. Haznedaroglu<sup>2</sup>

<sup>1</sup>Department of Gastroenterology, Turkiye Yuksek Ihtisas Teaching and Research Hospital, Ankara, Turkey

<sup>2</sup>Department of Hematology, Hacettepe University Medical School, Ankara, Turkey

\* American Journal of Emergency Medicine 2008 (in press)

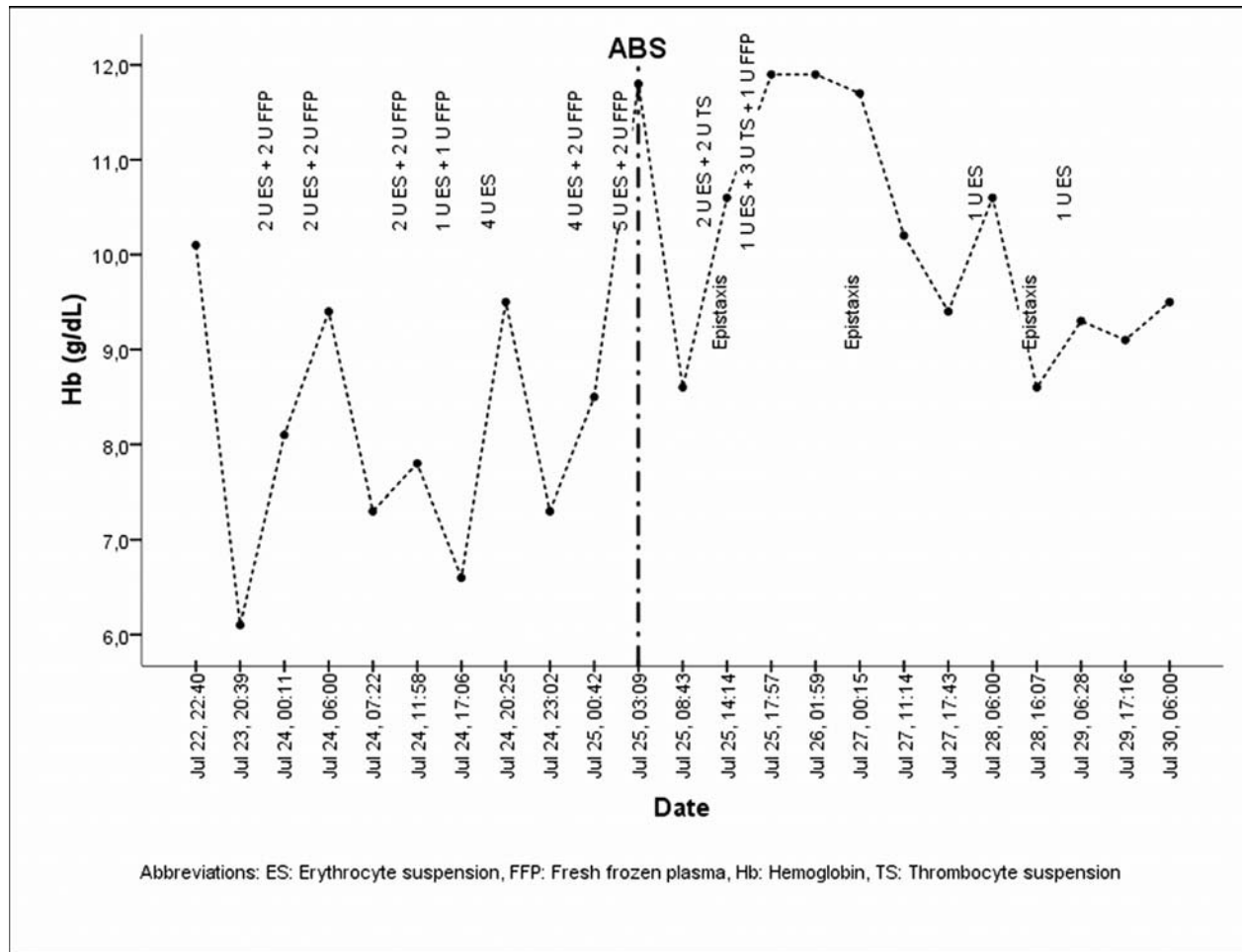
**Key words** Bleeding, Ankaferd, Ankaferd Blood Stopper

Ankaferd Blood Stopper (ABS) is a standardized unique combined medicinal plant extract, which has been approved in the management of post-surgery dental bleedings and external hemorrhage in Turkey (1). ABS induces a very rapid formation (less than 1 second) of a specific hemostatic protein network within vital erythroid aggregation in the injured vascular area (1). The data on the efficacy of ABS in GI system bleeding is limited to case reports only (2-4). Here, we present a patient with a severe gastrointestinal (GI) mucosal bleeding and nasal hemorrhage leading to hemodynamic instability, which was successfully controlled via the topical application of high-dose ABS.

A 69-year-old man was admitted into our intensive care unit because of hemorrhagic shock. Fifteen days ago, he was hospitalized to uncover the etiology of his jaundice and diagnosed with a Klatskin tumor. Then, endoscopic biliary decompression was performed with a sphincterotome, plastic stent placement and nasobiliary drainage. And the next day, he had an episode of massive hematemesis and hematochezia accompanied by hypotension (60/40 mmHg). His laboratory values were as follows: Hb: 6.1 g/dL (After a loss of 4 unit blood), platelet:  $259 \times 10^3/\mu\text{L}$ , activated partial thromboplastin time: 67.2 sec, prothrombin time: 33.0 sec. Emergent upper GI endoscopy showed dark clots and coffee-ground blood in the stomach. The gastric mucosa was hyperemic and edematous with multiple milimetric ulcers. There was another ulcer one centimeter in size at the bulbus of duodenum with no active bleeding. No oozing blood was observed at the sphincterotomized papilla. Colonoscopic evaluation was insufficient because of the blood in the lumen interfering with the vision. No site of active bleeding could be shown in selective mesenteric angiography. The patient was still hypotensive despite the administration of intravenous fluid, dopamin, erythrocyte suspension

(ES) and fresh frozen plasma (FFP) (Figure 1). After obtaining informed consent regarding the experimental nature of ABS as means of attaining hemostasis, a total of 100 ml ABS solution was administered by oral and rectal route. An enema set was used for the rectal administration. No sign of bleeding was observed in the following days except for the intermittent evacuation of small volumes of blood with dark clots and several episodes of epistaxis. The patient was hemodynamically stabilized with an obviously decreased requirement for ES and blood products (Figure 1). And dopamine was stopped. The first two episodes of nasal bleeding could be handled by nasal sponge tampon and topical adrenalin. However, the last epistaxis attack could only be stopped by nasal sponge tampon together with the topical administration of 8 ml ABS solution. And epistaxis never again recurred after that combined approach (Figure 1).

GI bleeding and multifocal hemorrhages leading to hemodynamic instability is sometimes a real diagnostic and therapeutic challenge as in our patient. The effective management of the bleeding problem is particularly required in patients with hereditary and acquired hemorrhagic diathesis including neoplasia and the use of anticoagulant, antihemostatic drugs (5). ABS, a standardized mixture of five plants, provides immediate hemostasis. A study showed that its effect is not dependent on individual coagulation factors and platelets (1). Its hemostatic success in primary and secondary hemostatic defects has been supported with *in vivo* and *in vitro* observations (1-4). Neither any local adverse effect nor systemic toxicity was observed following the topical high-dose application of ABS. Controlled clinical studies should be performed regarding the efficacy of ABS in the controlling of emergency bleedings.



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