

Title:

Hemostatic powder with argon plasma coagulation in management of gastric antral vascular ectasia after failure of APC therapy alone

Authors:

Do Seon Song, Yeon-Ji Kim

DOI: 10.17235/reed.2021.8426/2021

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Song Do Seon , Kim Yeon-Ji. Hemostatic powder with argon plasma coagulation in management of gastric antral vascular ectasia after failure of APC therapy alone. Rev Esp Enferm Dig 2021. doi: 10.17235/reed.2021.8426/2021.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Hemostatic powder with argon plasma coagulation in management of gastric antral vascular ectasia after failure of APC therapy alone

Do Seon Song¹, Yeon-Ji Kim²

¹*Department of Internal Medicine, College of Medicine, St. Vincent's Hospital, The Catholic University of Korea, Seoul, Republic of Korea*

²*Department of Internal Medicine, Nowon Eulji Medical Center, Eulji University, Seoul, Republic of Korea.*

Corresponding author: Yeon-Ji Kim

Division of Gastroenterology, Department of Internal Medicine, Eulji University Medical Center, 68 Hangeulbiseok-ro, Nowon-gu, Seoul, 01830, South Korea.

E-mail: dr.kimyj@gmail.com

Conflicts of interest: the authors declare none

This work was supported by the foundation of College of medicine, the Catholic University of Korea

CASE REPORT

A 62-year-old woman with a medical history of cirrhosis due to advanced primary biliary cholangitis was referred for recurrent severe anemia. Upper GI endoscopy revealed a gastric antral vascular ectasia (GAVE) (Figure 1). The hemoglobin levels were measured between 3 and 6 mg/dl for 10 years, and she received blood transfusion 2-3 times a year and continued endoscopic treatment. In particular, for 2 years from 2018, the decrease in hemoglobin level continued to be more severe, and endoscopic hemostasis using argon plasma coagulation (APC) was performed 11 times in total, but there was no significant clinical improvement. Finally, we performed the more complete endoscopic GAVE treatment using APC and hemostatic powder (UI-EWD) combined treatment performed. Immediately after

coagulation, UI-EWD was applied to the post coagulation ulcer (Figure 2(A,B)). After that, the following endoscopy performed one month later showed that the GAVE almost had disappeared and the hemoglobin level rose to more than 8 mg/dl (Figure 3).

DISCUSSION

Although the management of GAVE by endoscopic APC was the mainstay of non-surgical treatment, there has some limitations such as persistent bleeding and complication (1) Recently, hemostatic highly adhesive powder (UI-EWD; Next biomedical, Incheon, South Korea) was developed and used the cased that refractory UGIB included the non-variceal and variceal bleeding (2,3.) This case showed the patient who have portal hypertension with refractory GAVE. By application the hemostatic powder, we reduced the risk of complications related to the procedure and performed a more active APC treatment that resulted in treatment success.

REFERENCES

1. Wells C, Harrison M, Gurudu S, et al. Treatment of gastric antral vascular ectasia (watermelon stomach) with endoscopic band ligation. *Gastrointest Endosc* 2008;68:231–6.
2. Ibrahim M, El-Mikkawy A, Hamid M, et al. Early application of haemostatic powder added to standard management for oesophagogastric variceal bleeding: a randomised trial. *Gut*. 2019;68(5):844-53.
3. Park JS, Bang BW, Hong SJ, et al. Efficacy of a novel hemostatic adhesive powder in patients with refractory upper gastrointestinal bleeding: a pilot study. *Endoscopy* 2019 ;51(5):458-62.

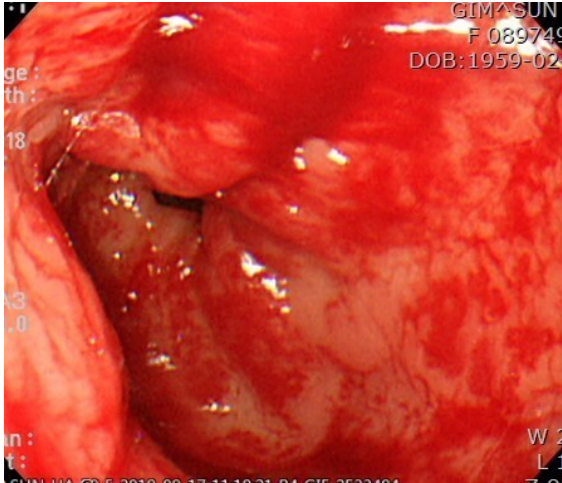


Figure 1. Endoscopic finding of refractory gastric vascular ectasia lesions

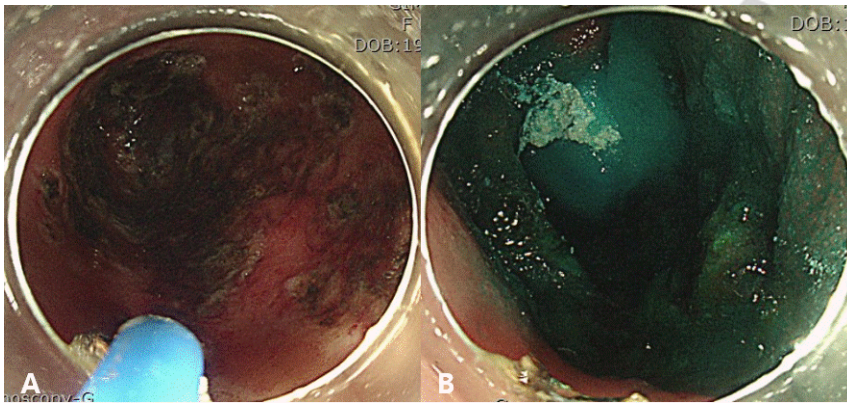


Figure 2. Endoscopic treatment of APC (A) with hemostatic powder (B)



Figure 3. One month after the last endoscopic treatment, the majority of ectasia lesions have disappeared.