

# "Angel Halo Esophageal Varix" On Endoscopic Varicealography In Patient With Extrahepatic Portal Vein Obstruction

H Imamura, A Irisawa, T Takagi, G Shibukawa, T Wakatsuki, Y Takahashi, A Sato, M Sato, T Hikichi, K Obara, H Ohira

## Citation

H Imamura, A Irisawa, T Takagi, G Shibukawa, T Wakatsuki, Y Takahashi, A Sato, M Sato, T Hikichi, K Obara, H Ohira. "Angel Halo Esophageal Varix" On Endoscopic Varicealography In Patient With Extrahepatic Portal Vein Obstruction. The Internet Journal of Radiology. 2005 Volume 5 Number 1.

## Abstract

A 60-year-old man was admitted to the emergency room with upper-GI bleeding. Emergent endoscopy revealed large esophageal varices with a fibrin plug. Endoscopic injection sclerotherapy was performed using 5% ethanolamine oleate with contrast medium under fluoroscopy. A strange venogram, "Angel halo", was visualized with no variceal feeders. Computed tomography showed cavernomatous transformation. Presented "Angel halo" varix is very rarely seen in patients with portal hypertension.

## INTRODUCTION

When endoscopic sclerotherapy perform under fluoroscopy, we can obtain the image of varices (varicealography) and its feeder arising from portal vein. Our case showed unusual varicealography during sclerotherapy under fluoroscopy. From the specific image, we called "Angel halo varices". It was reported that this varices rarely seen on endoscopy, it is important to know the existing like this variceal form.

## CASE REPORT

A 60-year-old man was admitted to the emergency room with upper-GI bleeding. He had a history of laparoscopic cholecystectomy at the age of 53 and no blood transfusion. Vital signs were: blood pressure, 96/54 mm Hg; resting heart rate, 86 beats per minute. Other results were the following: the Hb level was 7.7 g/dl (normal: 13.2–16.8 g/dl); platelets, 141,000/mm<sup>3</sup> (147,000–341,000/mm<sup>3</sup>); serum alanine aminotransferase, 21 IU/L (8–42 IU/L); total bilirubin, 0.8 mg/dl (0.4–1.2 mg/dl). No hepatitis viruses were identified. Emergent endoscopy revealed large esophageal varices with a white plug (fibrin plug) as shown Fig. 1-left. Subsequently, endoscopic injection sclerotherapy (EIS: intra-variceal injection) was performed using 5% ethanolamine oleate with contrast medium under fluoroscopy. Endoscopic varicealography revealed the post gastric vein and short gastric vein (Fig. 1-right). Those vessels were considered as

feeders of the esophageal varices. One week later, 2nd EIS was performed. Sclerosant with contrast medium was also injected into the remaining varices (Fig. 2).

## Figure 1

Figure 1: Left: large varix with red color sign was seen in lower esophagus on endoscopy. Right: injection sclerotherapy was performed using sclerosant with contrast medium. Esophageal varices and their feeders were seen.



Although we expected to obtain a varicealogram of variceal feeders similar that of the first treatment, a strange venogram, "Angel halo", was visualized with no feeders (Fig. 3).

**Figure 2**



Angel halo varix was seen around the esophagus on

endoscopic varicealography.

Ethanolamine oleate was injected into the "Angel halo" varix. Subsequently, several additional EIS were performed and esophageal varices were eradicated completely. Computed tomography during EIS sessions showed cavernomatous transformation. For that reason, he was diagnosed with extra hepatic portal obliteration.

### **DISCUSSION**

Presented "Angel halo" varix is very rarely seen in patients with portal hypertension. Identification of its variceal form using usual endoscopy is exceedingly rare. In our case, no halo-variceal form was visible on the endoscopic view. Although pathogenesis of the "Angel halo" varix might be a kind of collateral associated with portal hypertension, its role remains unknown.

### **CORRESPONDENCE TO**

Atsushi Irisawa, MD, PhD. Department of Internal Medicine  
2. Fukushima Medical University School of Medicine.  
Hikarigaoka 1, Fukushima City, 960-1295, JAPAN. Tel:  
+81-24-548-2111. Fax: +81-24-547-2055. E-mail:  
irisawa@fmu.ac.jp

### **References**

**Author Information**

**Hidemichi Imamura, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Atsushu Irisawa, M.D., Ph.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Tadayuki Takagi, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Goro Shibukawa, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Takeru Wakatsuki, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Yuta Takahashi, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Ai Sato, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Masaki Sato, M.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine

**Takuto Hikichi, M.D., Ph.D.**

Department of Endoscopy, Fukushima Medical University Hospital

**Katsutoshi Obara, M.D., Ph.D.**

Department of Endoscopy, Fukushima Medical University Hospital

**Hiromasa Ohira, M.D., Ph.D.**

Department of Internal Medicine 2, Fukushima Medical University School of Medicine