Endoscopic Corner

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Case 1

A 56-year-old male with a history of heavy alcohol drinking, has complaint about dysphagia and retrosternal pain during swallowing for 3 months. EGD demonstrated confluent, linear, yellowish elevated plaques covering on the erythematous mucosa throughout the esophagus (Figure 1). His anti-HIV result was non-reactive.

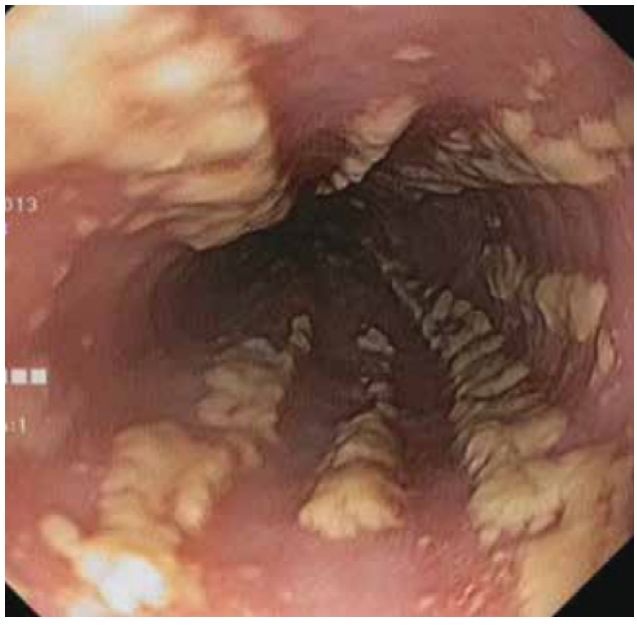

Figure 1. EGD revealed confluent, linear, yellowish elevated plaques covering on the erythematous mucosa throughout the esophagus.

Diagnosis:

Esophageal candidiasis (EC).

Discussion:

Esophageal candidiasis (EC) is the most common infectious disease of esophagus in patients with human immunodeficiency virus (HIV) infection and other conditions that impaired cellular immunity, but a rare condition among healthy people. Half of those with EC are asymptomatic. The risk factors of EC healthy individuals are prolonged use of antibiotics, corticosteroids, heavy drinking and herb medication[1,2].

Endoscopy is essential for the diagnosis, not only for evaluation by the gross appearance but also it can enable tissue biopsy. Systemic antifungal therapy with oral fluconazole remains the mainstay of treatment[3].

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CASE 2

A 67-year-old Thai monk presented with 2 episodes of melena within 3 months. He refused any history of hematemesis or dysphagia. EGD showed a deep, linear, friable ulcerative mass with elevated and irregular border, measured as 10 cm in length (Figures 1 and 2). This lesion was near the esophagogastric junction (EGJ) (Figure 3). Biopsy at the edge of ulcerative mass was done and histology showed squamous cell carcinoma.

Diagnosis:

Squamous cell carcinoma of the esophagus.

Discussion:

Esophageal squamous cell carcinoma (ESCC) is one of the two most common types of esophageal cancer. The incidence of ESCC is varying widely. It is accounting for 50-90% of esophageal cancer in developing countries but the incidence was lower by time[1]. The risk factors of ESCC include tobacco and alcohol drinking, achalasia, caustic injury and dietary such as drinking very hot beverages, aromatic hydrocarbon, and N-nitroso compound[1,2]. Symptoms of esophageal cancer depend on the stage of disease that usually asymptomatic but may present with melena as in this case. Others symptoms are dysphagia, weight loss, odynophagia, and fistula in advance stage[3]. Endoscopic findings of ESCC include fungating, friable, ulcerated mass lesions occupying some or the entire luminal circumference, usually with unclear margins. The middle esophagus is the most common involved location[4].

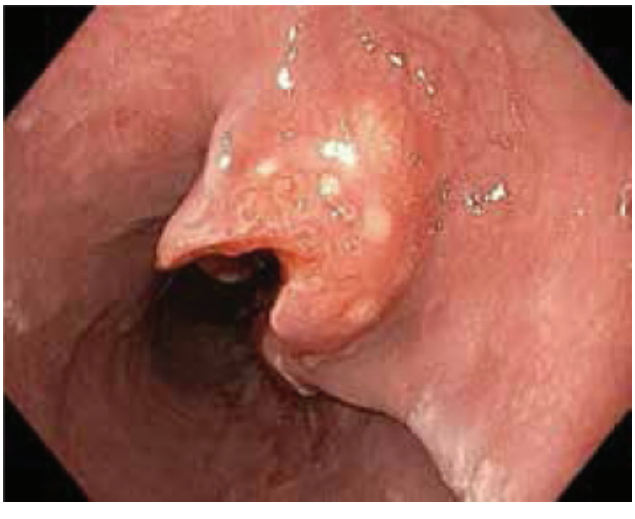

Figure 1

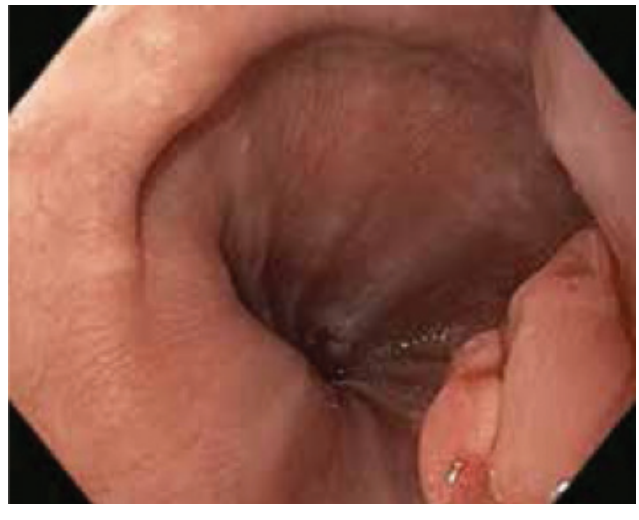

Figure 2

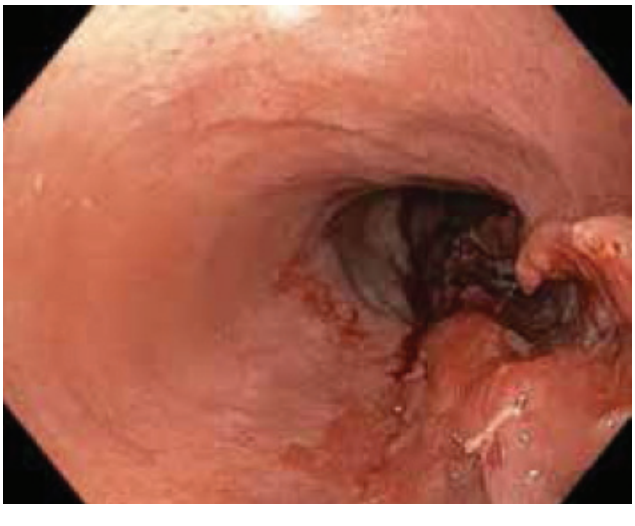

Figure 3

Figures 1 and 2. Deep, linear, friable ulcerative mass with elevated and irregular border with easily contact bleeding.

Figure 3. The lesion did not involve EGJ.

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CASE 3

A 69-year-old female presented with fatigue, dizziness, and melena for 1 month. Laboratory investigation showed iron deficiency anemia. The endoscopy showed multiple erythematous stripes of red tortuous ectatic vessels along longitudinal rugal folds in the antrum converging toward the pylorus (Figures 1 and 2).

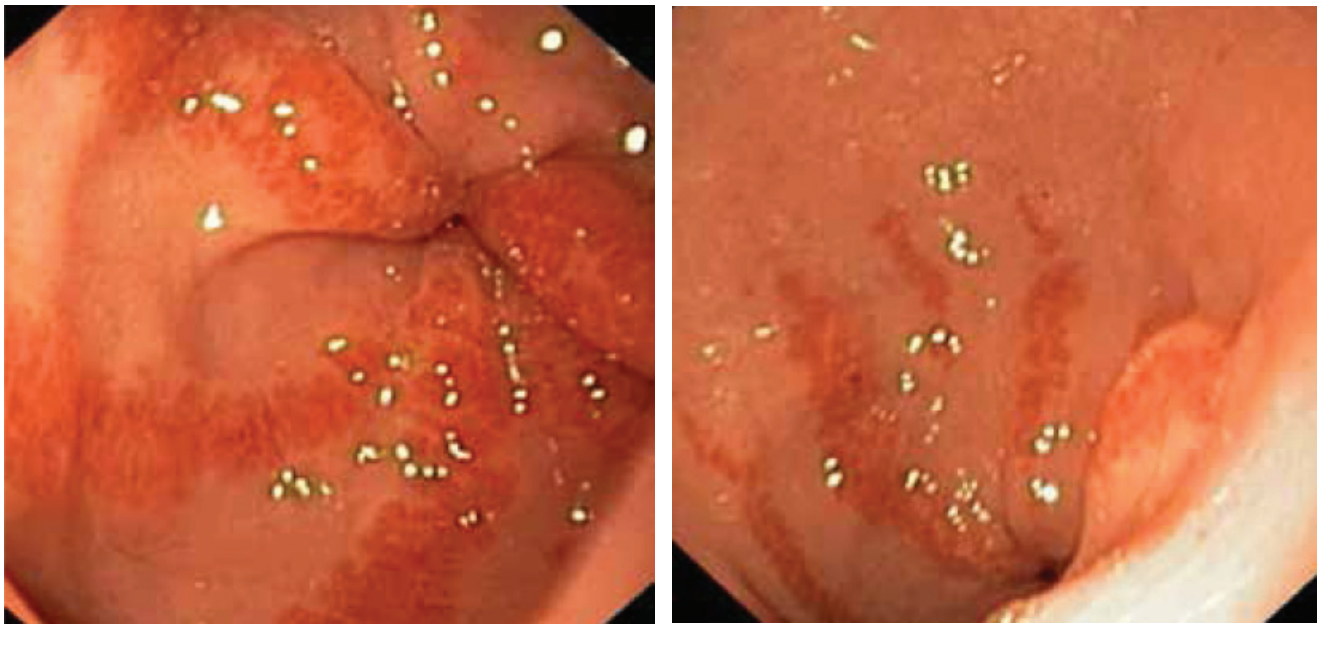
Diagnosis:

Gastric antral vascular ectasia (GAVE).

Discussion:

Gastric antral vascular ectasia (GAVE) accounted for 4% of non-variceal upper GI bleeding and usually presented with iron deficiency anemia due to occult GI bleeding[1]. The most commonly proposed mechanisms of GAVE are mechanical stress to gastric antral mucosa and locally high concentrations of vasoactive substance, leading to the dilatation of the blood vessels[1,2]. The most common underlying chronic illness is cirrhosis (30% of case[3], therefore, portal hypertensive gastropathy (PHG) can be found in the same situation. GAVE is most commonly limited to the antrum, while PHG predominantly located in the fundus and corpus, and with endoscopic appearance of snake-skin mosaic pattern. Moreover, the severity of portal pressure is not directly related to GAVE which is totally different from PHG[4].

APC was considered as the effective endoscopic therapy for GAVE with the success rate of 90%-100%[5]. Medical treatment has no benefit in GAVE-related bleeding[5].



Figures 1 and 2. Multiple stripes of red tortuous ectatic vessels along longitudinal folds of the antrum and converging toward the pylorus.

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CASE 4

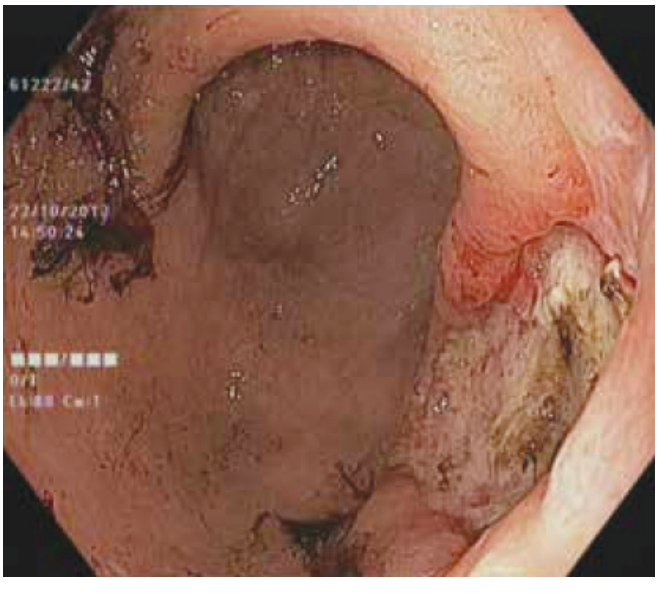
An 86-year-old male with a history of hypertension and dyslipidemia presented with melena and anemic symptom. Esophagogastroduodenoscopy (EGD) was done and showed a large gastric ulcer at the gastric body. The ulcer was deep and had irregular border (Figures 1 and 2). The microvascular pattern was clearly demonstrated by NBI (Figure 3). Magnify NBI showed a focal abnormal area of absence in microsurface pattern (MSP) and irregular microvascular pattern (MVP) at the border of the ulcer (Figure 4). Biopsy taken from the area was compatible with adenocarcinoma.

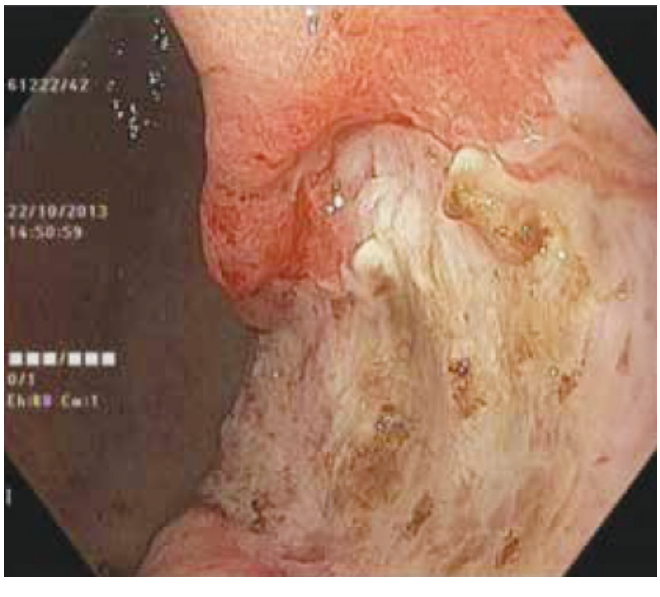
Diagnosis:

Adenocarcinoma of the stomach.

Discussion:

White light endoscopy has a limitation in differentiating malignant from benign gastric ulcer and also in detecting the early malignant gastric lesion. Only certain characteristics such as irregular shape, irregular and necrotic base, size larger than 2 cm and rigid border may suggest malignant lesions which yield a correct diagnosis in only about two-third of lesions. Some gastric cancers may have benign appearance with the reported rate of misclassification of 2-6%[1,2]. With magnifying NBI, the microstructure can be identified. In 2009, the new classification system was proposed by Yao[3]. The absence microsurface pattern (MSP) and irregular microvessel pattern (MVP) (type IV) had 89.7% in accuracy to identify malignancy[4].





Figures 1 and 2. White light endoscopy showed a large gastric ulcer at the body of stomach. The ulcer was deep with irregular border.

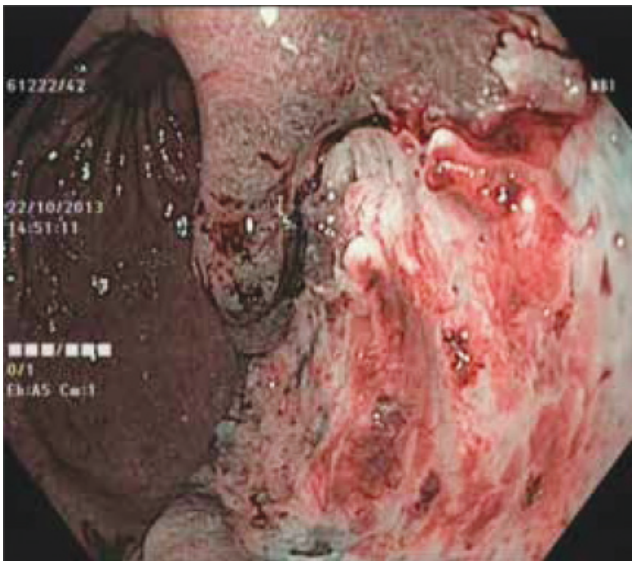


Figure 3. The microsurface pattern and microvascular pattern was clearly visible under the NBI mode.

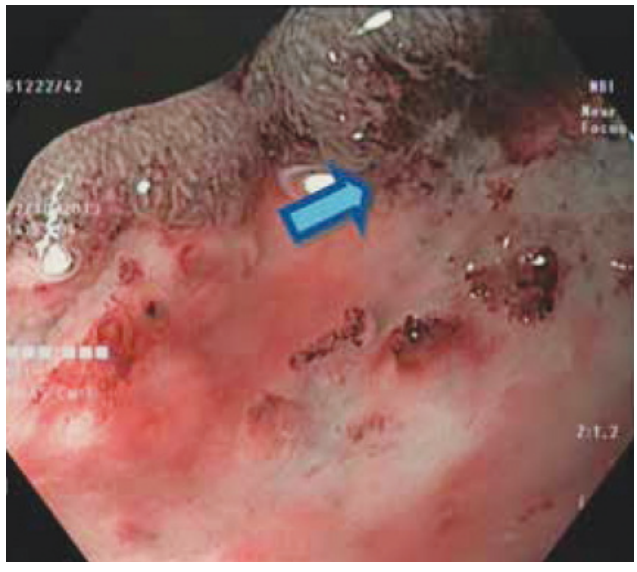


Figure 4. Magnifying NBI showed the absence of microsurface pattern with irregular microvascular pattern at the focal area near ulcer border (arrow).

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