HSV Esophagitis with Hematemesis and Recalcitrant Food Bolus

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Introduction

HSV esophagitis (HSV-E) affects primarily immunosuppressed individuals. Common symptoms include fever, odynophagia, dysphagia and retrosternal chest pain. Rare manifestations include hematemesis and food bolus. We present a 58 year-old woman with AML refractory to hematopoietic stem cell transplants (HSCTs) who developed HSV-E with hematemesis and food bolus.

Case Presentation

A 58 year-old woman presented to an outside hospital with acute dysphagia and hematemesis. Her past medical history includes refractory AML with HSCTs in 2007, 2010 and 2019 and GI graft-versus-host-disease (GVHD) on talazoparib and gemtuzumab. She was maintained on prophylactic valacyclovir up to and including her admission to the outside hospital. Outside EGD reported esophageal edema with possible obstruction, friable mucosa and superficial tears along the length of the esophagus. Biopsies were negative for viral cytopathic effect or malignancy. She was transferred to our hospital for NK cell infusion for AML. She had a prolonged hospital course with neutropenic fever and sepsis. She continued on acyclovir and isavuconazole for prophylaxis at our facility.

She developed dysphagia and EGD week 1 of her admission in our hospital showed ulcerated, hemorrhagic esophageal mucosa (Figure 1) with positive HSV biopsies. She was given IV foscarnet, acyclovir, pantoprazole and sucralfate. EGD was repeated week 3 for persistent dysphagia and odynophagia. Her esophagitis improved and biopsies were again HSV-positive. She had recurrent dysphagia and hematemesis at week 5. An updated EGD showed a massive esophageal food bolus that could not be cleared despite a 4 hour procedure. She was given a trial of Coca-Cola mixed with Creon to help dissolve the bolus. A 4th EGD was done 4 days later. This cleared the bolus after 4 more hours of procedure time (Figures 2-3).

EGD was repeated at Week 13 for foreign body sensation and showed mild sloughing of mucosa at 22 cm but the mucosa was otherwise healed (Figure 4). Biopsies showed squamous esophageal mucosa with chronic inflammation (HSV-negative). She developed recurrent colonic GVHD treated with immunosuppressants. She continued HSV prophylaxis with valganciclovir and did not develop recurrent HSV-E despite ongoing immunosuppression.

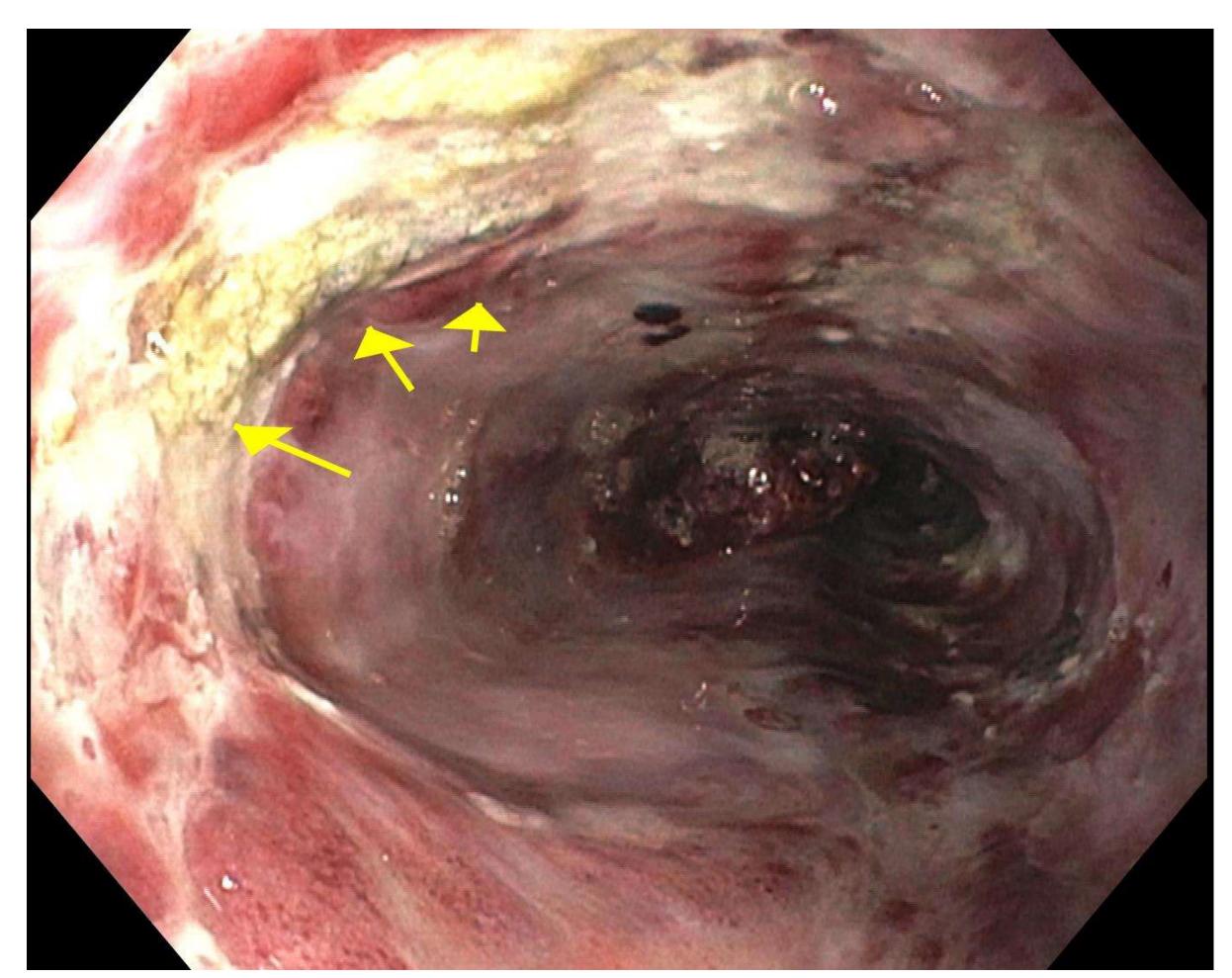


Figure 1: EGD image from week 1 showing hemorrhagic and ulcerated mucosa (yellow arrows).

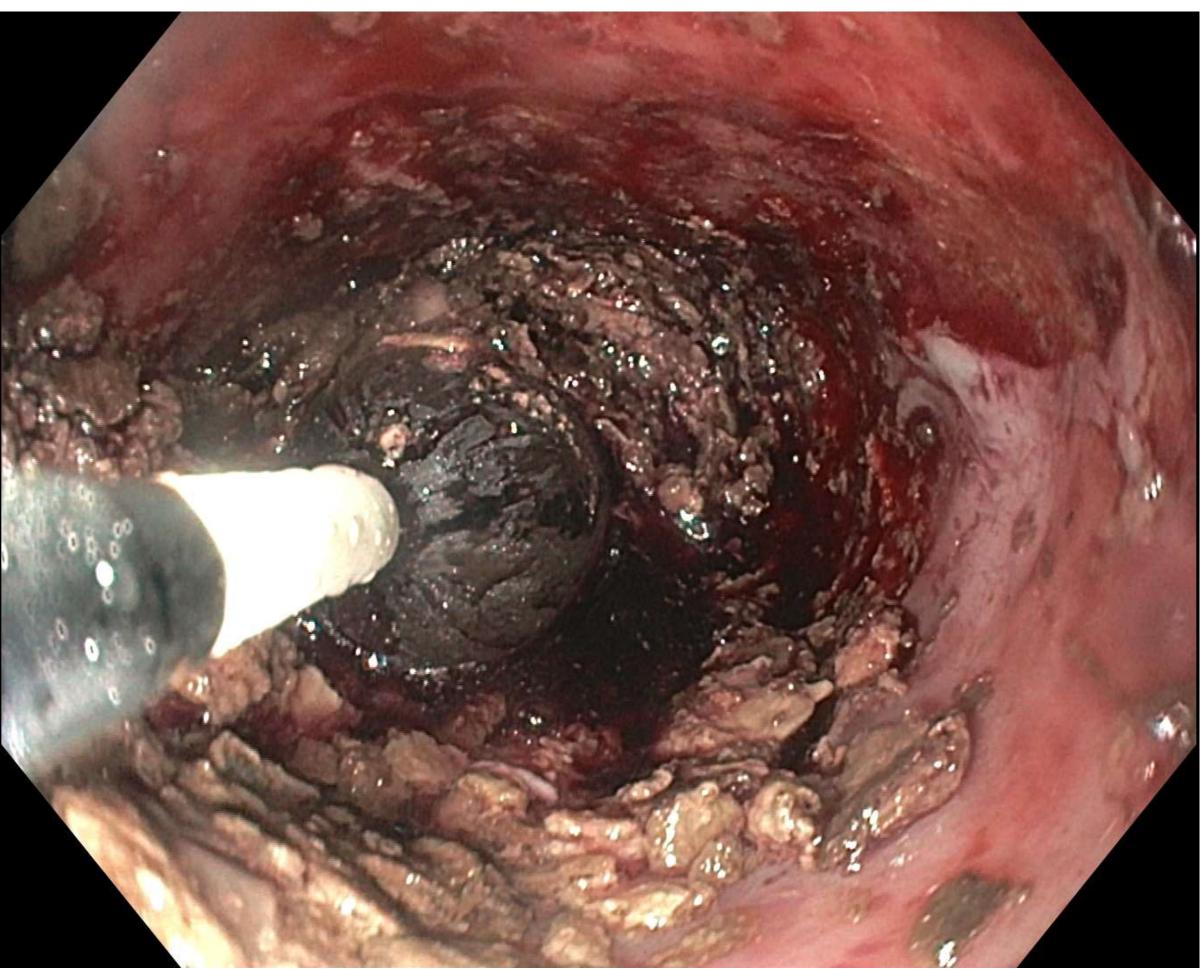


Figure 2: Endoscopic view of esophagus from week 5 showing hemorrhagic mucosa and massive food bolus.

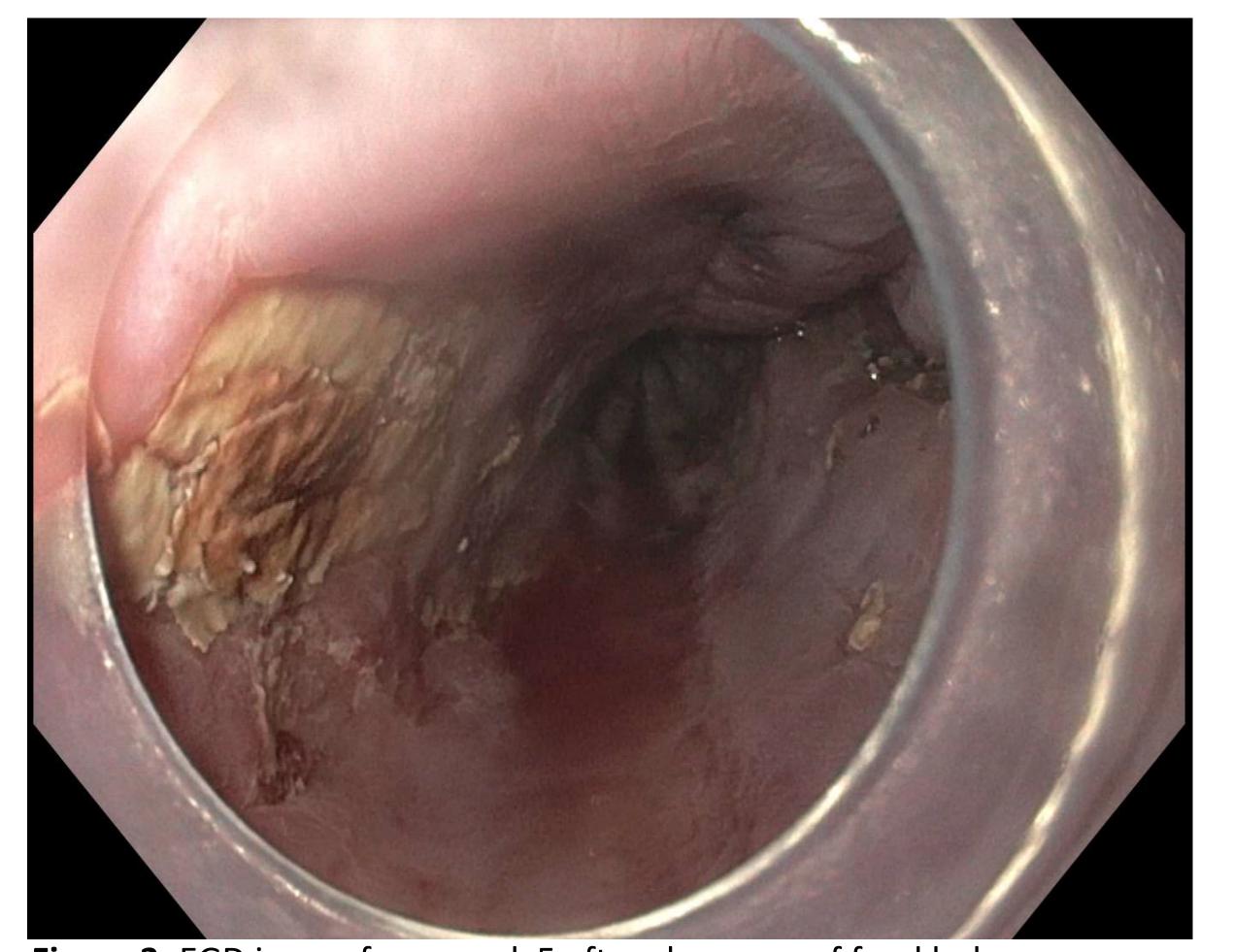


Figure 3: EGD image from week 5 after clearance of food bolus.

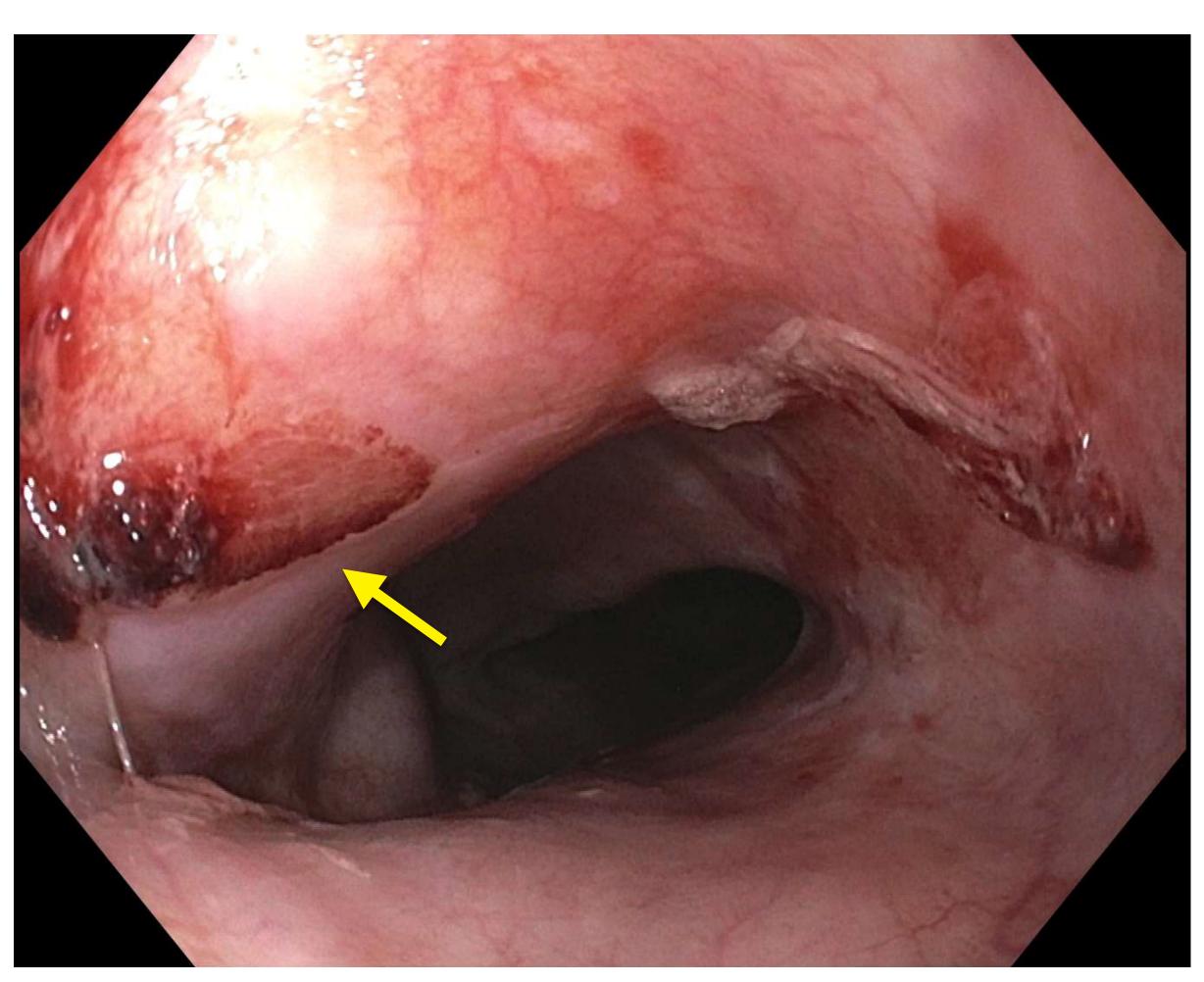


Figure 4: Endoscopic view of esophagus from week 13 EGD showing healing of esophagus apart from mild sloughing of mucosa at 22 cm (yellow arrow).

Discussion

HSV-E was first described in 1943 and only 1 case of HSV esophagitis presenting with food bolus has been reported. HSV-E most commonly affects immunosuppressed patients, including HSCT patients. The highest risk for HSV reactivation appears to be within 30 days of HSCT (67% of reinfections). Age >50 is associated with higher reactivation risk and HSV reactivation in the setting of cancer is associated with decreased overall survival.

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