

Massive Upper Gastrointestinal Hemorrhage Following Radiofrequency Ablation for Barrett's Esophagus

VA U.S. Department of Veterans Affairs

Sylvia Keiser, DO¹, Muhammad Haris, MD², Andrew Han, MD² UT Health San Antonio Internal Medicine Dept.¹; UT Health San Antonio Gastroenterology and Hepatology Dept.²

INTRODUCTION

- Radiofrequency ablation (RFA) is an established endoscopic technique for the management of Barrett's esophagus (BE) with low grade dysplasia (LGD).
- Bleeding risk after RFA treatment is ~ 1%.
- We present a case of massive upper GI bleeding following RFA treatment resulting in death.

INITIAL PRESENTATION

- HPI:
- 79-year-old male with history of Barrett's with LGD underwent EGD with RFA treatment.
- PMHx of CAD for which he was taking aspirin and prasugrel.
 Prasugrel was held seven days prior to EGD.
- EGD:
- Esophagus carefully examined using white light and narrow band imaging.
- No esophageal nodules were found; however, mucosal changes secondary to established short-segment Barrett's were seen.
- The BarrxTM 90 ultra RFA catheter was used to ablate the Barrett's mucosa and the procedure was uneventful.

CLINICAL COURSE

- Aspirin was resumed the following day, but prasugrel was held for one week post procedure.
- Ten days later the patient presented to an outside hospital with hematemesis and chest pain.

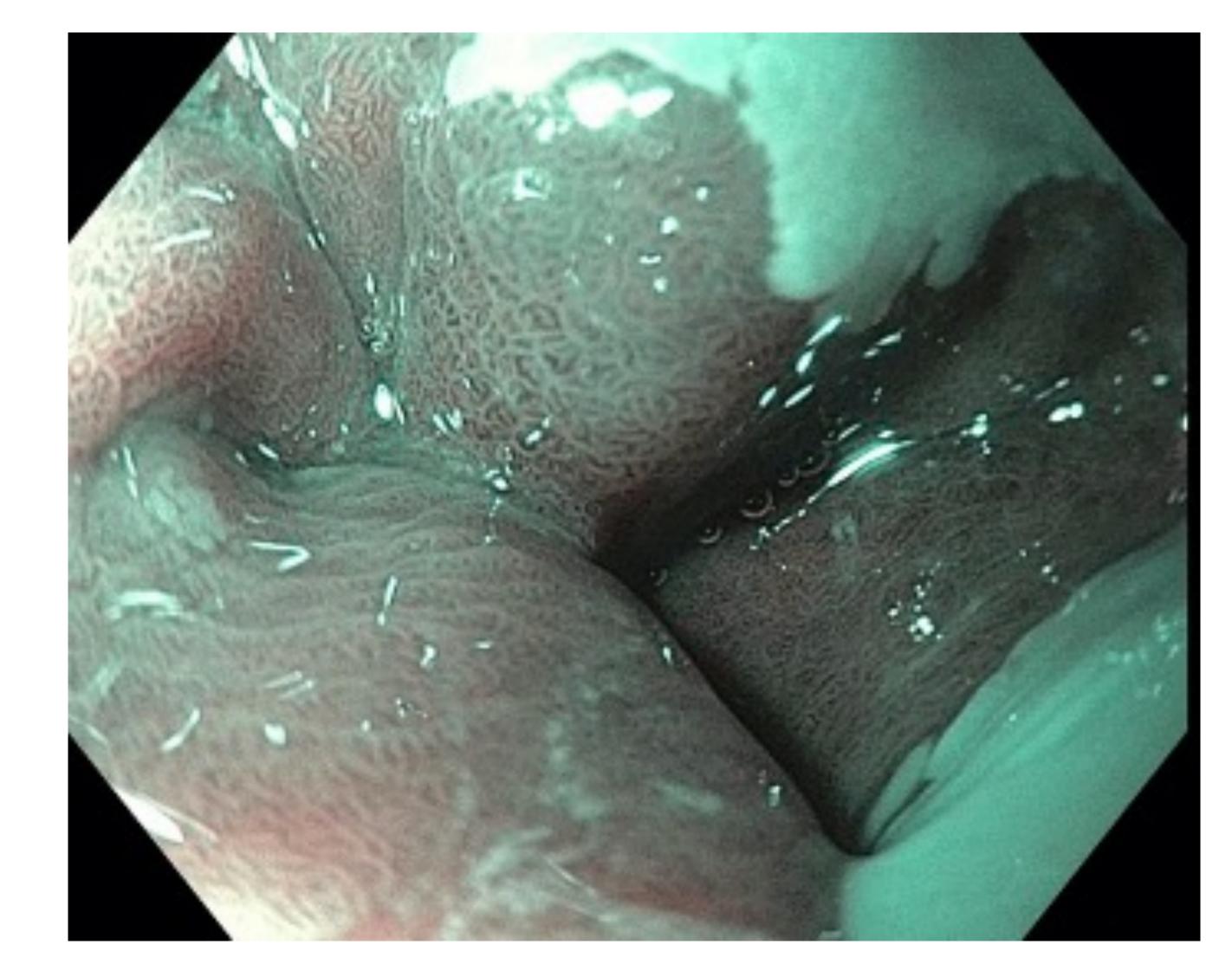


Image 1: Barrett's esophagus under NBI

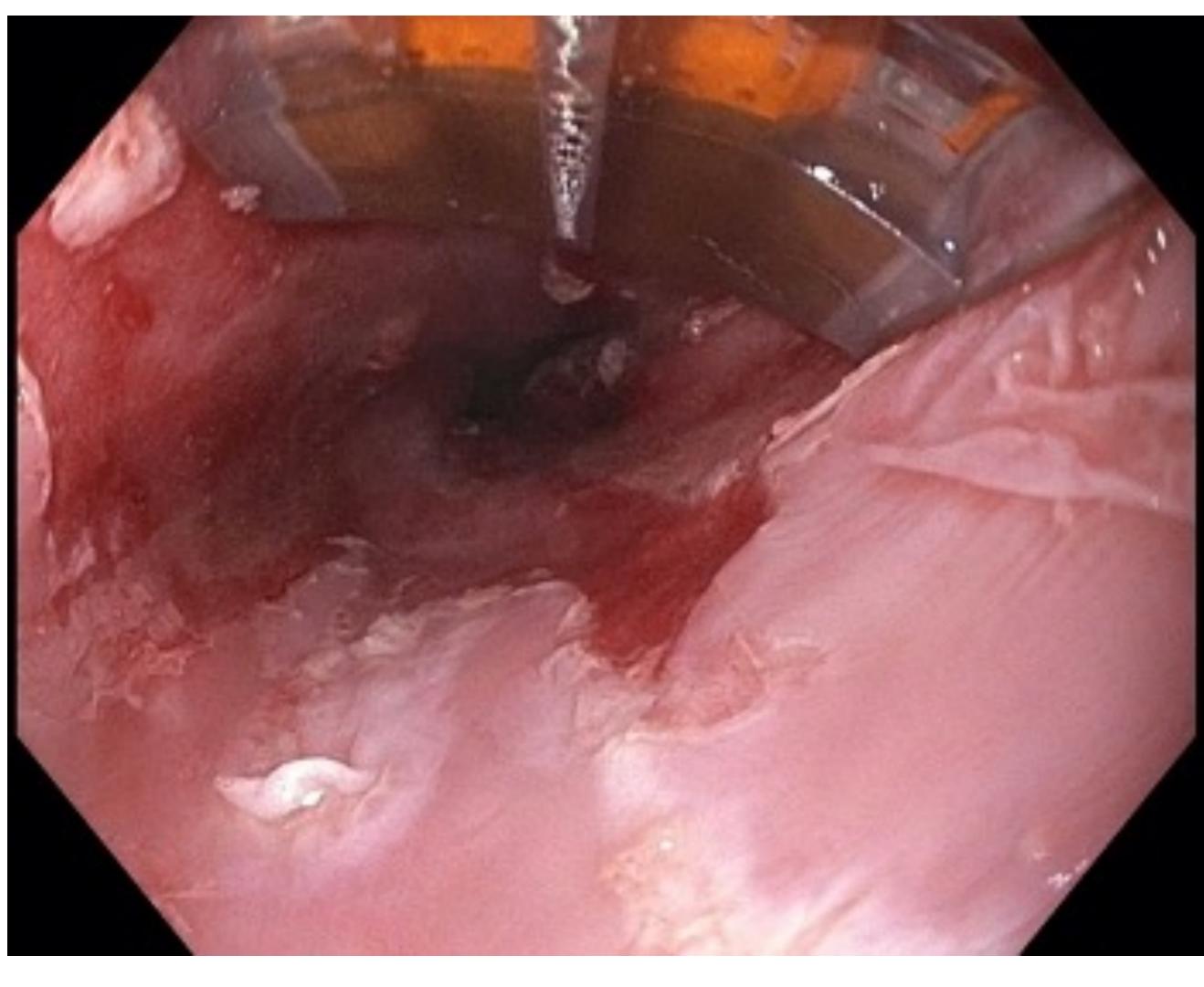


Image 2: RFA treatment

CLINICAL COURSE CONTINUED

- Emergent EGD demonstrated massive bleeding without obvious source.
- Mesenteric angiogram with embolization of left phrenic and gastric arteries was performed by interventional radiology.
- Repeat EGD revealed multiple large, deep ulcerations in the distal esophagus.
- Patient stabilized and downgraded from the ICU.
- Two days later he developed acute respiratory failure with multi-organ failure, thought to be due to aspiration.
- Patient was transitioned to comfort care and passed away.

DISCUSSION

- RFA is considered a safe and effective technique for the treatment of patients with BE with low- or high-grade dysplasia.
- Frequent adverse events following RFA treatment are esophageal stricture (8-10%), chest pain, bleeding (1%) and perforation (0.6%).
- Guidelines for patients on DAPT for secondary prevention who are undergoing elective procedures suggest temporary interruption of the P2Y12 inhibitor while continuing aspirin.

CONCLUSION

- The above guidelines were followed in our patient; however, no clear guidance for when to resume newer anticoagulants exists.
- After extensive literature review, we did not find any case reports of massive upper GI bleed resulting in death following RFA treatment.