

Not All That Bleeds Is of Gastrointestinal Origin: Hemorrhagic Anemia from the Nasopharynx

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Image Article

A 62-year-old female with a history of chronic pain on daily non-steroidal anti-inflammatory medication presented to the emergency room with weakness and malaise. Initial hemoglobin was 3.4 g/dL, down-trending to 2.8 g/dL with concern for acute blood loss. Further studies revealed iron deficiency anemia with an iron level less than 15 and a ferritin of 12.6; occult blood testing was negative. Esophagogastroduodenoscopy demonstrated a hiatal hernia, Schatzki's ring, and poor dentition with loose teeth, but no active bleed was identified. Colonoscopy showed mild sigmoid diverticulosis and distal colitis; however, no bleeding was located to account for the patient's profound anemia. Capsule endoscopy revealed an active bleed from the mouth (Figures A, B) with bright red blood in the esophagus and stomach along with dark blood in the small intestine without active bleed. These findings suggested acute blood loss from hemorrhagic gingivitis versus traumatized gingiva around the teeth. Computed tomography of the neck with contrast identified an ulcerated malignancy occluding the nasopharyngeal airway. Positron emission tomography confirmed the large nasopharyngeal mass without distant metastatic disease (Figure C), and subsequent biopsy revealed a non-keratinizing squamous cell carcinoma secondary to human papillomavirus sixteen (Figure D). Though deemed a poor surgical candidate, the patient underwent chemoradiation and was eventually discharged to a skilled nursing facility and continues to do well several months later.

Authors' contributions:

- Lindsey Bierle: reviewed medical records and data, participated in manuscript drafting and editing, and obtained endoscopic images.

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- Mohamad Mouchli: served as one of the primary consulting providers during the patient's hospitalization, reviewed medical records and data, and participated in the manuscript editing.
- Douglas Grider: obtained photomicrograph and participated in manuscript editing.

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Informed consent: Verbal consent to publish was obtained from the patient, November 2019.



Figure A: Capsule endoscopy locating the source of the underlying bleed.

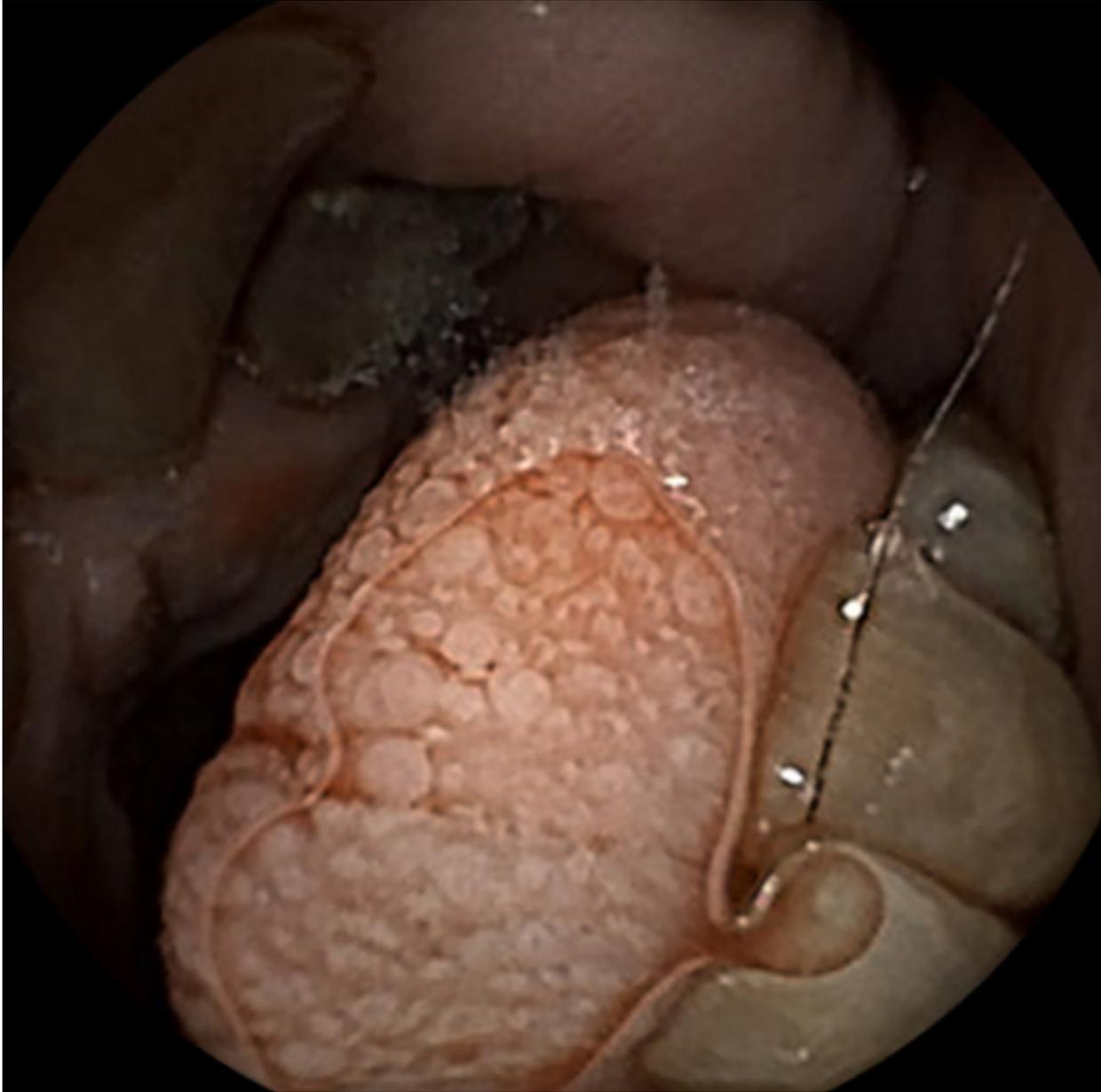


Figure B: Capsule endoscopy identifying the underlying mass accounting for the hemorrhage.



Figure C: Positron emission tomography highlighting the nasopharyngeal mass.

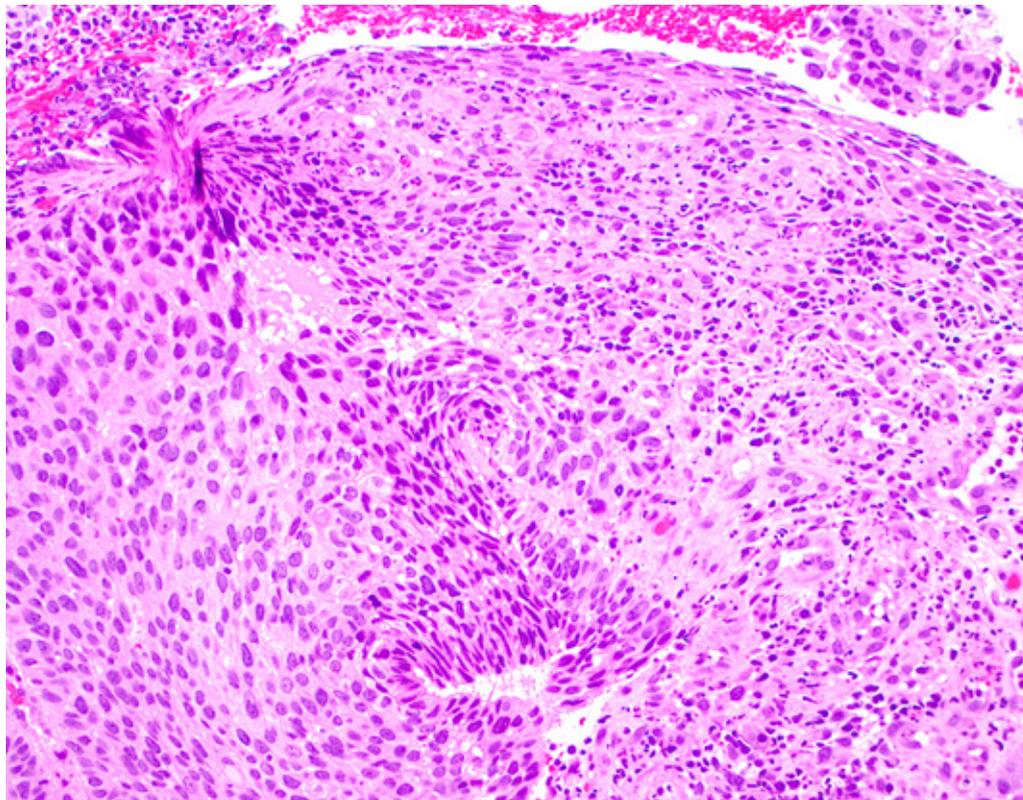


Figure D: H&E of the non-keratinizing squamous cell carcinoma at 200 magnification.