Received: 3 January 2024 | Accepted: 10 January 2024

DOI: 10.1002/emp2.13112

JACEP OPEN · WILEY

IMAGES IN EMERGENCY MEDICINE

Nontrauma and Medical

Airway compromise in a patient with hemophilia A

Megan E. McLin-Evans MD | **John D. Wofford MD**

Department of Emergency Medicine, University of Mississippi Medical Center, Jackson, Mississippi, USA

Correspondence
Megan E. McLin-Evans, Department of Emergency Medicine, University of Mississippi Medical Center, Jackson, MS, USA.
Email: mmclin2@umc.edu

1 | PATIENT PRESENTATION

A 36-year-old male with a diagnosis of severe hemophilia A and a history of recurrent hemarthrosis presented with sore throat and dysphagia. He complained of a sore throat and globus sensation that he could not clear with coughing. Physical examination revealed normal vital signs and right tonsillar hematoma with rightward uvular deviation. A computed tomography scan revealed a large hematoma extending from the right mucosal pharyngeal space into the supraglottic region, resulting in mass effect (Figure 1). Laryngoscopy further confirmed the presence of a right-sided oropharyngeal hematoma extending below the vocal folds, posing a significant risk to the patient's airway (Video 1). Immediate interventions, including positive pressure ventilation, administration of recombinant factor VIII, and intravenous corticosteroids, temporarily alleviated the patient's symptoms. Subsequently, the patient was admitted to the Medical Intensive

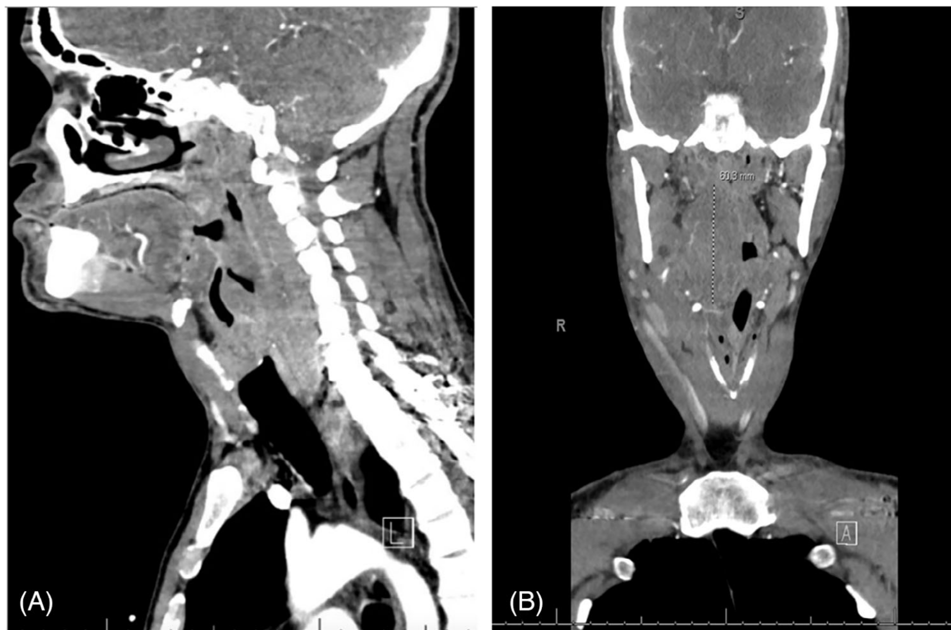
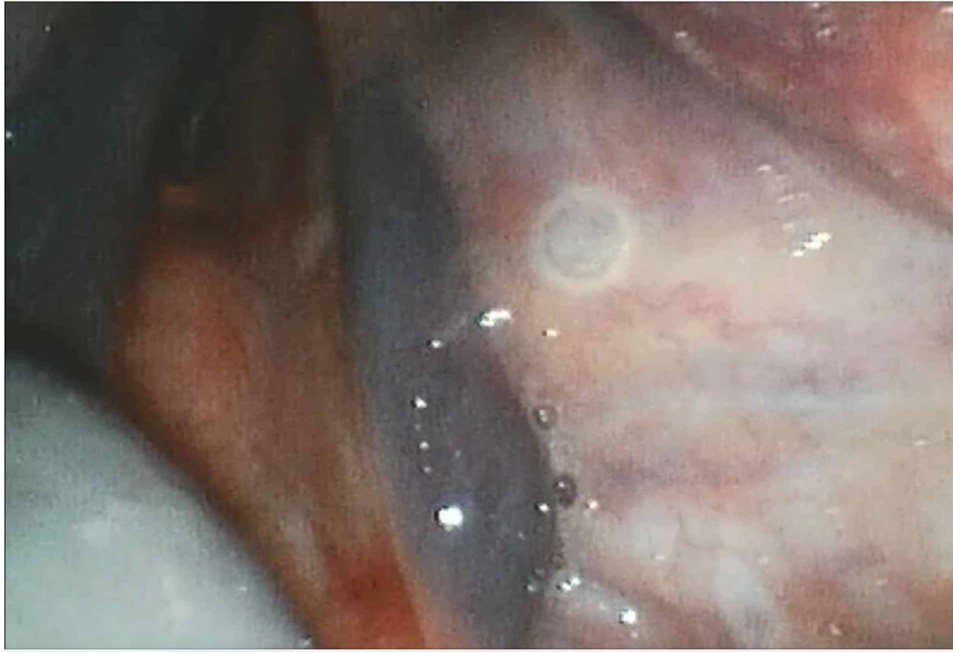


FIGURE 1 (A) Sagittal computed tomography (CT) image demonstrating large hematoma causing mass effect and near-complete effacement of the supraglottis. (B) Coronal CT image demonstrating 60.3 mm ill-defined heterogeneous fluid collection in the right mucosal pharyngeal space extending inferiorly into the supraglottic region.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.
© 2024 The Authors. *JACEP Open* published by Wiley Periodicals LLC on behalf of American College of Emergency Physicians



VIDEO 1 Hematoma extends inferior to level of vocal folds on the right side. Epiglottis partially visualized. Some ball valving of hematoma into airway, cords unable to be visualized.

Care Unit for continuous airway monitoring and underwent emergent tracheostomy placement by Otolaryngology.

2 | DIAGNOSIS: SPONTANEOUS OROPHARYNGEAL HEMATOMA IN HEMOPHILIA A PATIENT

Encountering a spontaneous pharyngeal hematoma in a patient with hemophilia A highlights the intricate challenges of managing patients with hemophilia. This clinical scenario underscores the vital significance of immediate recognition and interdisciplinary collaboration to avert potential airway compromise. Maintaining constant vigilance over the patient's airway is imperative, especially in the context of hemophilia, where even minor bleeds can rapidly escalate into life-threatening situations.[1]

Replenishing factor VIII was complicated in this case because the patient had a factor inhibitor. Thus, he required a bypassing product, which was Factor eight inhibitor bypass activity in this case. Recombinant factor VIII alone would likely not have been enough to halt progression of his bleeding emergency. Additionally, intravenous corticosteroids can play a pivotal role in mitigating inflammation and addressing challenges associated with hematoma formation. Moreover, initiating empiric antibiotics should be considered, as hematoma formation can create an environment conducive to superinfections. This proactive approach can be helpful in managing potential microbial threats and ensuring comprehensive patient care.[2]

CONFLICT OF INTEREST STATEMENT

The authors declared no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

ORCID

Megan E. McLin-Evans MD https://orcid.org/0000-0003-1400-8372

REFERENCES

1. Kageyama Y, Matsumoto T, Tawara I, Wada H, Katayama N. Life-Threatening tongue and retropharyngeal hemorrhage in a patient with hemophilia A with inhibitors. *Am J Case Rep*. 2019;20:1022-1026. doi:10.12659/AJCR.916151. Published 2019 Jul 15.
2. Vandermeulen L, Mana F, Nieboer K, Urbain D. Spontaneous esophageal intramural hematoma in a young man wrongly diagnosed as achalasia. *Open J Gastroenterol*. 2012;2:81-84. doi:10.4236/ojgas.2012.22017

How to cite this article: McLin-Evans ME, Wofford JD. Airway compromise in a patient with hemophilia A. *JACEP Open*. 2024;5:e13112. https://doi.org/10.1002/emp2.13112