

THE CLINICAL PICTURE

ANDREW TIU, MD

Department of Medicine,
Einstein Medical Center, Philadelphia, PA

KAMOLYUT LAPUMNUAYPOL, MD

Department of Medicine, Einstein Medical Center,
Philadelphia, PA

Pseudo-Ludwig angina

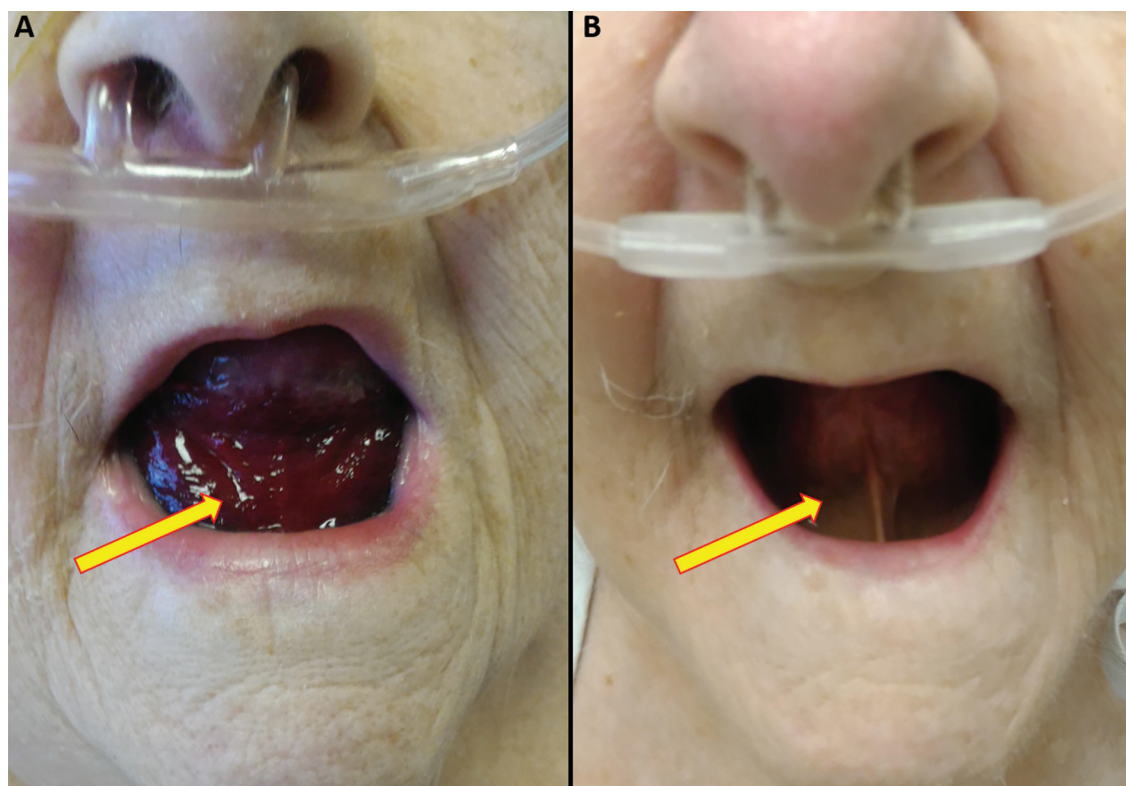


Figure 1. (A) After 48 hours of heparin infusion, the patient developed violaceous swelling at the floor of the oral cavity. (B) At 2 months after anticoagulation was stopped, the sublingual hematoma had completely resolved.

A woman on heparin for pulmonary embolism developed a sublingual hematoma that threatened to block the airway

AN 83-YEAR-OLD WOMAN with hypertension, hypothyroidism, and a history of depression presented to the emergency department with acute shortness of breath and hypoxia. She was found to have submassive pulmonary embolism, and a heparin infusion was started immediately.

After 48 hours, she developed uncontrolled drooling and hoarseness. Physical examination at that time revealed inspiratory stridor and violaceous swelling at the floor

of the oral cavity (**Figure 1**), and laboratory testing revealed a supratherapeutic activated partial thromboplastin time (aPTT) of 240 seconds (therapeutic range 76–112 for a patient on heparin for pulmonary embolism).

Urgent nasopharyngeal laryngoscopy revealed a hematoma at the base of her tongue that extended into the vallecula, piriform sinuses, and aryepiglottic fold, causing acute airway obstruction. These features combined with the supratherapeutic aPTT led to the diagnosis of pseudo-Ludwig angina.

doi:10.3949/ccjm.86a.19014

■ DANGER OF RAPID AIRWAY COMPROMISE

Pseudo-Ludwig angina is a rare condition in which over-anticoagulation causes sublingual swelling leading to airway obstruction, whereas true Ludwig angina is an infectious regional suppuration of the neck.

Most reported cases of pseudo-Ludwig angina have resulted from overanticoagulation with warfarin or warfarin-like substances (rodenticides), or from coagulopathy due to liver disease.¹⁻³ Early recognition is essential to

avoid airway compromise.

In our patient, all anticoagulation was discontinued, and she was intubated until the hematoma began to resolve, the aPTT returned to normal, and respiratory compromise improved. At follow-up 2 months later, the sublingual hematoma had completely resolved (**Figure 1**). And at a 6-month follow-up visit, the pulmonary embolism had resolved, and pulmonary pressures by 2-dimensional echocardiography were normal. ■

■ REFERENCES

1. **Lovallo E, Patterson S, Erickson M, Chin C, Blanc P,**

Durrani TS. When is “pseudo-Ludwig’s angina” associated with coagulopathy also a “pseudo” hemorrhage? *J Investig Med High Impact Case Rep* 2013; 1(2):2324709613492503. doi:10.1177/2324709613492503

2. **Smith RG, Parker TJ, Anderson TA.** Noninfectious acute upper airway obstruction (pseudo-Ludwig phenomenon): report of a case. *J Oral Maxillofac Surg* 1987; 45(8):701–704. pmid:3475442
3. **Zacharia GS, Kandiyil S, Thomas V.** Pseudo-Ludwig’s phenomenon: a rare clinical manifestation in liver cirrhosis. *ACG Case Rep J* 2014; 2(1):53–54. doi:10.14309/crj.2014.83

.....
ADDRESS: Andrew Tiu, MD, Department of Medicine, Einstein Medical Center, 5501 Old York Road, Philadelphia, PA 19141; tiuandre@einstein.edu