Spontaneous sublingual hematoma due to warfarin: An emergency presenting to the dermatologist

Sir,

A 47-year-old man presented to us with a painless red swelling of his tongue causing difficulty in speech and swallowing for 2 days. He had been on oral warfarin (4 mg/day) for atrial fibrillation for 6 months before this. His international normalized ratio (INR) was monitored weekly with a target of 2–3. There was no history of recent trauma or external bleeding. Physical examination revealed a tense, tender, red submucosal hematoma involving the floor of the mouth and ventral lingual surface bilaterally [Figures 1 and 2]. The tongue was pushed slightly upward and the patient could protrude his tongue only with difficulty. Vital parameters were normal and systemic examination was non-contributory.

Flexible endoscopic examination revealed that there was no extension of the swelling into the pharynx, laryngeal mobility was normal and the airway was not compromised. Laboratory tests showed a hemoglobin level of 12.3 g/dl with normal leukocyte (6000/mm^3) and platelet (1.4 lacs/mm^3) counts. C-reactive protein and erythrocyte sedimentation rate were not raised. However, the INR at presentation was high (4.8).

Since there were no signs of impending airway compromise, he was managed conservatively with a single dose of vitamin K (5 mg intravenously) and 5 units of fresh frozen plasma.

Warfarin was discontinued, and the INR returned to normal within 48 h. The hematoma also decreased in size with improved tongue mobility within a couple of days. The patient was then put on dabigatran (150 mg orally, twice daily), a direct thrombin inhibitor which is less often associated with bleeding and does not require INR monitoring. The patient is still under our follow-up and has not had any further bleeding episodes or embolic manifestations.

Warfarin is frequently used for the prevention of embolic events.[1] Bleeding complications of warfarin have typically been described in the genitourinary and gastrointestinal tracts, the skin, the central nervous system, the nose (epistaxis), the penis (priapism) and the retroperitoneum.[1-4] Sublingual hematoma is rare but potentially fatal complication of oral warfarin therapy.[2,3,5] There are reports of postoperative deaths following spontaneous sublingual hematomas from anticoagulation.[3,5] There are also case reports of airway obstruction from spontaneous sublingual hematomas secondary to oral anticoagulation.[3,5] It is imperative to differentiate this condition from infectious processes such as Ludwig's angina as they are managed differently.[2] Securing the airway should be the main concern and prompt reversal of anticoagulation with close observation is required.[1-4] In the absence of airway compromise necessitating an artificial airway, medical therapy with reversal of the coagulopathy with vitamin K, fresh frozen plasma or factor concentrates remains the mainstay

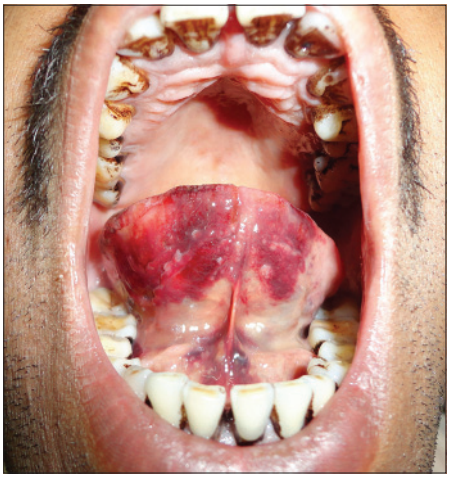

Figure 1: Red submucosal hematoma involving the floor of the mouth and ventral lingual surface bilaterally

Figure 2: Submucosal hematoma involving the ventral surface and right lateral border of the tongue

of management.[2] With an expanding hematoma, elevation of the tongue and floor of mouth can cause airway obstruction. In these cases, laryngoscopic intubation is difficult. Early definitive airway stabilization should be the priority with rapid sequence intubation. If rapid sequence intubation fails, emergency cricothyroidotomy or tracheostomy may be performed for definitive airway stabilization in the emergency department.[6]

Any patient on oral anticoagulation who comes with a sore throat or swelling of the tongue should be evaluated carefully because these symptoms may herald acute airway obstruction. Patients and their relatives should be educated about the side effects of these drugs. Since patients often initially seek a dermatological opinion for oral mucosal disorders, dermatologists may encounter sublingual hematomas in their practice with the increasing use of anticoagulation therapy. Dermatologists may therefore play a role in the prompt recognition of a sublingual hematoma by distinguishing it from other similar-looking conditions (Ludwig's angina, traumatic swelling, vascular malformation, hemorrhagic mucocele) and by timely appropriate referral, they might prevent airway compromise.

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Conflicts of interest
There are no conflicts of interest.

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