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Warfarin induced sublingual hematoma: A rare complication of anticoagulant therapy

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ABSTRACT

Anticoagulation is very effective for primary and secondary prevention of thromboembolic events. Warfarin sodium is the well known and the most widely used anticoagulant. Sublingual hematoma is the rare complication and can cause the airway obstruction. We present the case of sublingual hematoma secondary to usage of Warfarin therapy.

1. Introduction

Anticoagulation is very effective for primary and secondary prevention of thromboembolic events. Warfarin sodium is the well known and the most widely used anticoagulant. Sublingual hematoma is the rare complication and can cause the airway obstruction. We present the case of sublingual hematoma secondary to usage of Warfarin therapy.

2. Case report

A 43-year-old woman with a history of mitral valve replacement surgery of two years ago presented to the emergency department (ED) with swelling and bleeding in the mouth initiating 6 h ago. She has been taking warfarin 5 mg once a day for two years. The patient's vital signs were as follows: blood pressure was 149/89 mmHg, heart rate 117/min, respiratory rate 19/min and body temperature 36.6 °C. Physical examination was normal except bloody sublingual hematoma (Figure). Prothrombin (PT) and activated prothrombin time

(aPTT) and International Normalized Ratio (INR=7.4) were prolonged. She was admitted to the hospital. The only fresh frozen plasma (FFP) and vitamin K were given for treatment. In the 24 h, symptoms and signs resolved almost completely and the patient showed no signs of respiratory distress at any point in time. She was discharged from the hospital fully recover the 2 d later.

3. Discussion

Warfarin is frequently used as an oral anticoagulant in a variety of clinical setting, e.g. atrial fibrillation or following valvular heart disease¹. The most common complications are bleeding in the genitourinary and gastrointestinal tracts, skin, central nervous system, nose, penis, or retroperitoneum. Major bleeding, which includes intracranial hemorrhage and bleeding leading to death or hospitalization, has been reported in 1.2%–8.1% of patients during each year of long-term warfarin therapy¹. However, rarely, warfarin may cause bleeding that compromises a patient's airway. A sublingual hematoma like our patient is a rare and unexpected complication. There were a number of case reports in the medical literature. These cases vary in their severity. Our case is more benign than other cases. In some of reported case in the medical literature, both

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invasive (cricothyroidotomy or tracheostomy) and noninvasive (oro-tracheal intubation) techniques were performed for definitive airway stabilization[2–6].

Hemorrhage and hematoma of the oral cavity can be fatal. Spontaneous bleeding and hematoma into the sublingual and submaxillary spaces can create a pseudo-Ludwig's phenomenon[4]. With the expanding hematoma, tongue and floor of the mouth become elevated and can cause airway obstruction. In this situation, laryngoscopic intubation is impossible. Because of these reasons, early definitive airway stabilization should be performed with rapid sequence intubation (RSI). If RSI is failure, emergency cricothyroidotomy or tracheostomy should be performed for definitive airway stabilization in the emergency department. Life-threatening hemorrhage secondary to oral anticoagulant should be immediately reversed with FFP, followed by vitamin K, FFP is rich in active vitamin K-dependent coagulation factors and will reverse oral anticoagulant-induced coagulopathy in most patients. In general, approximately 15 mL/kg of FFP should be adequate to reverse any coagulopathy[7–22].

In conclusion, warfarine induced sublingual hematoma can cause airway obstruction. In these patients early definitive airway management is crucial treatment in the emergency department.

Conflict of interest statement

We declare that we have no conflict of interest.

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