

An Unreported Cause of Buccal Mucosal Hematoma: A Rare Complication After Heparin Therapy in a Patient with Chronic Renal Failure

Bukkal Mukoza Hematomunun Bildirilmemiş Bir Nedeni: Kronik Böbrek Yetersizliği Olan Bir Hastada Heparin Tedavisi Sonrası Nadir Bir Komplikasyon

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ABSTRACT

Patients receiving anti-coagulants such as heparin can suffer from significant complications of these medications. Herein, we report a buccal mucosal hematoma in a heparinized patient with chronic renal failure.

Key Words: Mouth mucosa; hematoma; heparin; renal insufficiency.

Received: 07.09.2012 • **Accepted:** 14.09.2012

ÖZET

Heparin gibi antikoagülan ilaç kullanan hastalar bu ilaçlara bağlı ciddi komplikasyonlarla karşılaşabilirler. Burada kronik böbrek yetersizliği olan bir hastada gelişen bukkal mukoza hematomu olgusu sunulmaktadır.

Anahtar Kelimeler: Ağız mukozası; hematoma; heparin; böbrek yetmezliği.

Geliş Tarihi: 07.09.2012 • **Kabul Tarihi:** 14.09.2012

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INTRODUCTION

A 64-year-old man with a history of chronic renal failure, type II diabetes mellitus, coronary artery bypass graft surgery and mitral valve replacement presented with acute coronary syndrome. After anti-coagulation with unfractionated heparin (UFH) instead of warfarin a buccal hematoma occurred.

CASE REPORT

A 64-year-old man with a history of chronic renal failure, type II diabetes mellitus, coronary artery bypass graft surgery and mitral valve replacement with the 29 mm Sorin bi-leaflet valve (11 years ago) was presented with chest pain. His physical examination was normal upon admission, and his electrocardiogram showed ST segment depressions. Transthoracic echocardiography, performed in the coronary intensive care unit, revealed inferior wall hypokinesia. He was diagnosed with non-ST-segment elevation myocardial infarction. Warfarin therapy was stopped because of planning coronary angiography; and UFH was initiated with a 5000 unit bolus, followed by infusion at 1000 u/h. Before the initiation of heparinization, prothrombin time, activated partial thromboplastin time and international normalized ratio were 20.1 s, 34.6 s, and 1.9, respectively. Two days later, about 3.0 x 3.5 cm hematoma occurred on his left buccal mucosa (Figure 1). His hemoglobin and platelet levels were within normal limits. While treatment with heparin was stopped, treatment with oral anti-coagulants was started because of a risk for prosthetic valve thrombosis. Thereafter, the hematoma spontaneously dropped without any sequela (Figure 2); and the pathologic findings were consistent with hematoma (degenerative squamous cell in blood and edematous fibrinous tissue) (Figure 3).



Figure 1. About 3.0 x 3.5 cm hematoma occurred on the left buccal mucosa.

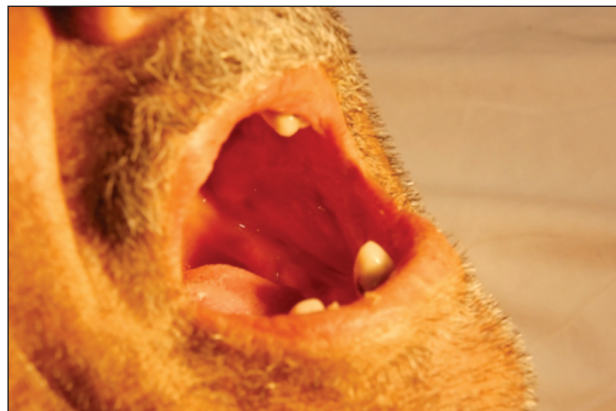


Figure 2. The hematoma spontaneously dropped without any sequela.

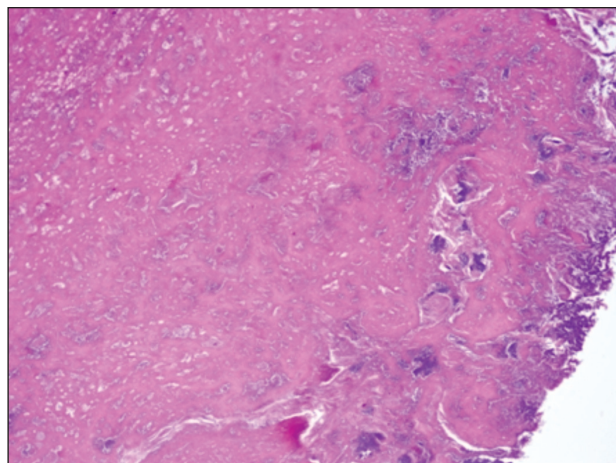


Figure 3. Pathologic findings were consistent with hematoma.

DISCUSSION

Intraoral hematomas generally result from trauma⁽¹⁻³⁾. They can develop after motor vehicle accidents grand mal seizures or traumatic tracheal intubation in a warfarin-treated patient⁽⁴⁻⁷⁾. Such hematomas, however, can occur in the absence of overt trauma in patients receiving thrombolytic therapy^(8,9). Oral mucosa is commonly abraded or have small cuts simply from chewing and process of eating. In our case erosion caused by trauma maybe progressed to hematoma.

Heparin is frequently used for the treatment of acute coronary syndromes. It is cleared through a combination of a rapid saturable mechanism, and much slower unsaturable mechanism⁽¹⁰⁾. The slower, unsaturable mechanism of clearance is largely renal; therefore, it can accumulate in patients with impaired renal function, increasing the risk

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of hemorrhage. Strategies for managing intraoral hematomas differ widely. Surgery or fiberoptic nasal intubation may be required in patients with airway obstruction⁽⁶⁻⁹⁾. Fortunately, in our case discontinuation of UFH was sufficient for the treatment of buccal hematoma.

The present case showed that heparinization may have caused the buccal hematoma. Heparin should be used only with close monitoring of activated partial thromboplastin time in patients with chronic renal failure.

CONFLICT of INTEREST

None declared.

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