Angina Bullosa Hemorrhagica as a Presenting Feature of Malignant Hypertension: A Case Report

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ABSTRACT

A conscious and oriented 37-year-old female presented with a sudden onset small hemorrhagic lesion over the soft palate, which was diagnosed as angina hemorrhagica bullosa. Blood pressure was found to be 220/180 mmHg and there was presence of papilledema on funduscopic examination. Patient was diagnosed as a case of malignant hypertension, which was treated medically for hypertension and no local treatment was given. Lesion resolved and patient was free of symptoms after 2 weeks.

Keywords: Hemorrhagic lesion, soft palate, angina hemorrhagica bullosa, papilledema, funduscopic examination, malignant hypertension

Badham suggested angina bullosa hemorrhagica (ABH) as the term for an oral mucosal blood blister that occurs without any evidence of blood dyscrasias or vesiculobullous disorders.[1] Exact cause of ABH is still not determined, although most cases described in the literature seem to be associated with the long-term use of inhaled steroids, hypertension, consumption of hot beverages (thermal injury), mastication-related traumatic injuries, chronic renal failure, asthma, diabetes, rheumatoid arthritis, gastrointestinal disturbances and hyperuricemia, etc.[2-7] This can help in further identifying the etiology of ABH as well as may enhance the knowledge of various presenting features of malignant hypertension, which should be ruled out in every case.

CASE REPORT

A 37-year-old female patient presented to the ENT Department with complaints of foreign body sensation noticed, more on swallowing. The symptoms appeared few hours ago and were sudden in onset. There was no history of bleeding from throat or respiratory distress. There was no history of recent trauma or intake of hot beverages. There was no history of chronic disease or prolonged drug intake.

On examination, there was a single blood filled blister over the soft palate in the midline, dumbbell-shaped in appearance with regular margins. It measured about 3 cm in the long axis and about 1.5 cm in the maximum horizontal dimension. The blister was dark red in color, tense and nontender on palpation (Fig. 1). Surrounding mucosa was normal without any evidence of erythema or scarring. Indirect laryngoscopic examination was normal. Rest of the ENT examination did not reveal any abnormality. No hemorrhagic lesions were seen on the rest of the body. Oral hygiene was good.

Blood pressure (BP) was recorded to be 220/180 mmHg in the right arm in sitting position. Immediate fundus examination of the eye revealed bilateral papilledema suggestive of end organ damage due to raised BP. Routine blood investigations including hemoglobin, total leukocyte count, differential leukocyte count, peripheral smear, erythrocyte sedimentation rate (ESR), blood sugar, urea, creatinine and coagulation profile including platelet count, prothrombin time (PT), activated partial thromboplastin time (aPTT), international normalized ratio (INR) showed values within normal limits. Rheumatoid arthritis factor was also within normal limits.

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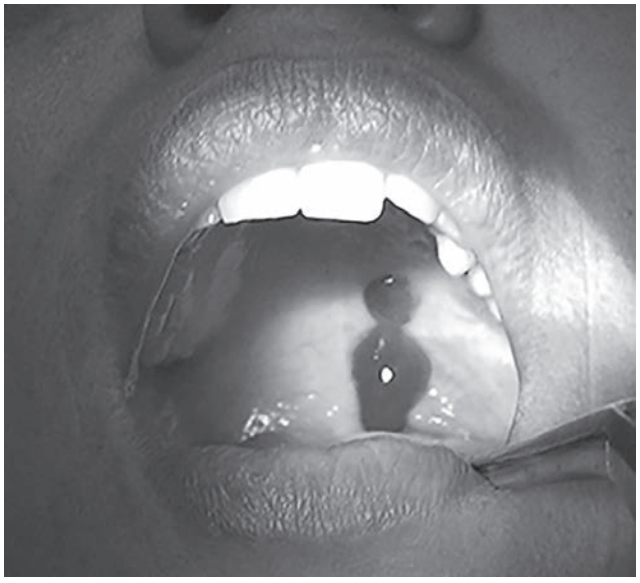

Figure 1. Hemorrhagic blister on the soft palate in the midline.

The patient was sent to the intensive care unit (ICU) where was admitted and BP was controlled. Patient was put on regular antihypertensives and was followed up for throat symptoms and lesion. Patient started noticing relief from throat symptoms after 4-5 days of starting treatment as blister started fading. The blister had completely resolved by 2 weeks after the control of BP with no subsequent scarring and the patient was free of symptoms.

Betadine mouth wash and instructions to maintain good oral hygiene and to take salt free semisolid/liquid diet was given. No other local treatment was given as the patient did not complain of any pain or odynophagia or any obstructing symptoms.

On the basis of the presenting complaints and appearance of the lesion and absence of blood dyscrasias or vesiculobullous disorders, a diagnosis of ABH was made in this case. Malignant hypertension appeared to be the cause for this sudden onset.

DISCUSSION

ABH is believed to be an idiopathic condition. ABH is usually seen in middle-aged adults with no gender predilection.[4] The chronic use of inhaled steroids affects collagen synthesis causing atrophy of the mucous epithelium and alters the synthesis of collagen reducing its content in the submucosa. Tissue elasticity may decrease with the maturation of these fibers. This leads to the poor support to the blood vessels present in the region leading to hemorrhage spontaneously or in response to minor trauma.[8] Weakening of the junction between epithelial and connective tissue can make non-keratinized mucosa more susceptible to trauma. This can also play a role in development of submucosal blisters due to minor trauma.[9]

The above said theories lead to a speculation that trauma is the most common factor for development of ABH. Other authors have reported chronic use of inhaled steroids as the predisposing factor. Hypertension is implicated in the genesis of the lesion by some authors.[10] Diabetes mellitus also seems to play a role. A case report has linked ABH to chronic renal failure.[11] The exact etiology, however, remains unknown.

The blisters are usually seen on the soft palate and may be present on the gingival mucosa or lateral border of the tongue. Multiple or recurrent lesions are uncommon.[10] No treatment is indicated for the disorder as the blister ruptures and heals spontaneously within a week. However, surgical drainage may be considered if it is obstructing the airway.[12]

In our case of hemorrhagic blister over palate, the sudden rise in BP might have caused a day minor vessel in the palate to bleed, which formed a small blister. No specific local treatment was given in our case as there were no complaints of any pain or obstructive symptoms.

The blister healed spontaneously after the BP came to normal levels within 2 weeks. Patients was put to regular medication and follow-up. No similar complaints were present after 1 year of follow-up.

CONCLUSION

This case is unique as no history of trauma or prolonged steroid inhalation was elicited. Only abnormality detected was a high BP (220/180 mmHg). The age of the presentation was also younger. The patient was not a known case of diabetes or hypertension. Therefore, the blister can be considered to have originated as a result of sudden rise in BP. This can help in further identifying the etiology of ABH. It has to be kept in mind that causes such as leukemias, thrombotic thrombocytopenic purpura (TTP), immune thrombocytopenic purpura (ITP) and other bleeding disorders must be ruled out before making a diagnosis of ABH.

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Make sure

During Medical Practice

Situation: An obese hypertensive patient was put on a calcium channel blocker.

Lesson: Make sure to remember that telmisartan improves cardiometabolic profile in obese patients with arterial hypertension. A study has demonstrated that 6-month treatment with telmisartan improves insulin sensitivity, increases the concentration of serum adiponectin and its high-molecular-weight fraction and decreases concentrations of the inflammatory markers in obese patients with arterial hypertension.

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