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Black Domes On Lips

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ABSTRACT

The circulation of coagulation factors in the blood is significantly reduced when there is liver disease in a patient. This may result in complications or manifestations in various parts of the body, including the oral cavity. Bleeding diathesis secondary to liver disease is not uncommon, but self-limiting bleeding episodes with characteristic clinical presentations, as described in this case report, are uncommon.

Keywords: Blood coagulation disorder; international normalized ratio; liver diseases; lips, oral cavity.

INTRODUCTION

There are various factors which may lead to deranged liver function. The circulation of coagulation factors in the blood is significantly reduced in association with an increasing severity of liver disease. This may have complications or manifestations in various parts of the body, including the oral cavity.[1] Prothrombin time (PT) is the time taken by plasma to clot after addition of tissue factor and measures the quality of the extrinsic and common pathway of coagulation.[2] INR is the ratio of patient's PT to the control.[3]

Localized lip swelling is a common clinical finding characterized by enlargement of the upper or lower lip due to inflammatory, allergic, infectious, traumatic, or vascular causes. Pathophysiologically, swelling results from increased vascular permeability and interstitial fluid accumulation mediated by histamine, bradykinin, or cytokines. Acute presentations are frequently associated with angioedema, contact dermatitis, or insect bites, whereas chronic swelling may suggest cheilitis granulomatosa, neoplasms, or systemic disease. Clinical evaluation includes assessment of onset, duration, pain, erythema, and airway involvement. Management targets the underlying etiology and may involve antihistamines, corticosteroids, antimicrobials, or supportive care. Prompt recognition is essential to prevent complications early.[4]

Citation
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In this case report, we intend to present one such case with a common pathology but an uncommon oral manifestation.

CASE REPORT

A call was made to the department of Oral Medicine and Radiology for interdepartmental consultation regarding a 23-year-old female on her second post-operative day of emergency lower segment caesarean section with pre-eclampsia. The patient complained of multiple swellings on her lips for 2 days. On examination four hard dome shaped swellings were present on the lips, one in the upper and three in the lower, ranging from size of 8-12 mm squared. Few areas of fresh blood with clots were present around the swelling (Fig. 1). There were no abnormalities detected in intraoral examination. There were no signs of bleeding from other areas and dermatological abnormalities.

She also had history of post-partum haemorrhage with five pints of blood transfusion in last 24 hours with severe jaundice. The patient did not have any significant past medical and surgical history. She was receiving treatment with broad-spectrum antibiotics, vitamin K, ursodeoxycholic acid and supportive measures.

Her biochemical parameters revealed deranged liver function tests with total and conjugated bilirubin of 9 and 6.8 mg/dL, SGOT/SGPT/ALP of 349, 879 and 287 U/L respectively with deranged prothrombin time of 40 seconds with INR of 3.29. She also had moderate thrombocytopenia of 69,000 platelets/cubic millimetre. The patient also had microscopic haematuria.

Bleeding diathesis secondary to coagulopathy, erythema multiforme and multiple melanomas on lip were considered as differential diagnoses.

On the basis of haematological reports, deranged liver function tests and clinical presentation, the provisional diagnosis of bleeding diathesis secondary to coagulopathy was confirmed.

On follow-up evaluation after 3 days, platelets and liver function tests were normalized and INR of 2 was achieved with medical interventions. The black domes had already shed off and lips had healing ulcers. Follow-up after 4 weeks revealed completely healed ulcers. Further, patient did not have new bleeding episode.

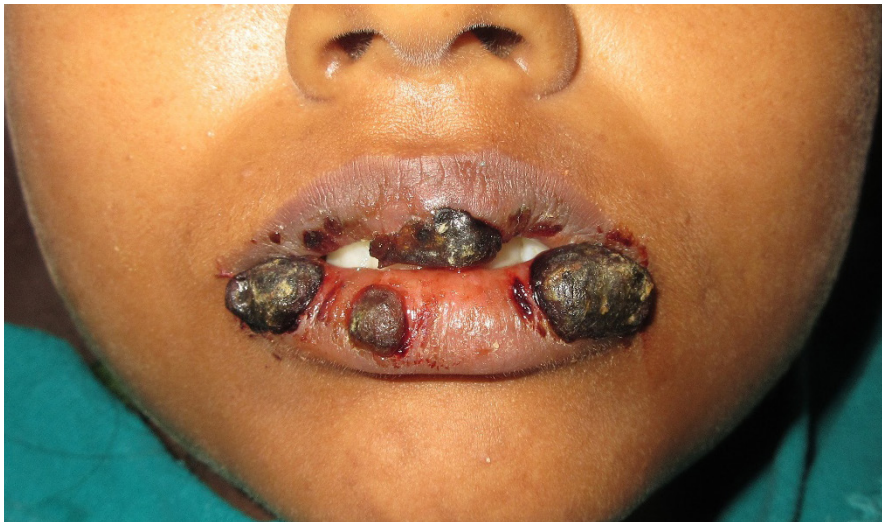

Figure 1: Black dome-shaped swellings on the upper and lower lips

DISCUSSION

In pregnancy complicated by eclampsia and liver failure, elevated PT and thrombocytopenia predispose to bleeding tendency. Although having deranged biochemical parameters, bleeding complications are clinically insignificant which again comprises self-limiting upper gastro-intestinal bleed.[5] However, in our case, it manifested as bleeding from lips.

Increased bleeding tendency secondary to coagulopathy is not an uncommon phenomenon, but the clinical presentation of black dome shaped swellings is uncommon.[1] The bleeding, as in our case, being self-limiting in nature could be a reason why multiple bleed areas have presented as dormant black domes.

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REFERENCES

1. Cocero N, Bezzi M, Martini S, Carossa S. Oral surgical treatment of patients with chronic liver disease: assessments of bleeding and its relationship with thrombocytopenia and blood coagulation parameters. J Oral Maxillofac Surg. 2017;75(1):28-34. [PubMed | Full Text | DOI]
2. Bates SM, Weitz JI. Coagulation assays. Circulation. 2005;112(4):e53-60. [Full Text | DOI]
3. Bellest L, Eschwège V, Poupon R et al. A modified international normalized ratio as an effective way of prothrombin time standardization in hepatology. Hepatology. 2007;46(2):528-34. [PubMed | Full Text | DOI]
4. Glick M. Burket's oral medicine. PMPH USA; 2015. [Full text]
5. Stravitz RT, Ellerbe C, Durkalski V et al. Bleeding complications in acute liver failure. Hepatology. 2018;67(5):1931-42. [PubMed | Full Text | DOI]