

<https://doi.org/10.48047/AFJBS.7.4.2025.938-941>



African Journal of Biological Sciences

Journal homepage: <http://www.afjbs.com>



Research Paper

Open Access

Case report of sever hemorrhage in buccal arteriovenous malformation

Asim Salih BDS, Clinical MD

Hisham Dwedary, Tamer Abdelrahim helmy

Volume: 7, Issue 4, Apr 2025

Received: 15 Feb 2025

Accepted: 05 Mar 2025

Published: 05 Apr 2025

[doi:10.48047/AFJBS.7.4.2025.938-941](https://doi.org/10.48047/AFJBS.7.4.2025.938-941)

Introduction

Vascular anomalies can be classified to hemangiomas and vascular malformation which further classified to high flow like arterial malformation and low flow which are capillary venous and lymphatic malformations. Careful history and thorough clinical examination are vital tools before any invasive investigation or treatment

CASE REPORT

A thirty five years old man referred from his general practitioner with large buccal swelling of a duration of many years.This swelling started before 20 years as he remembered but recently it started to enlarge slowly causing an obvious deformity and facial asymmetry in addition to hotness of the overlying skin.

The recent and obvious increase in size forced the patient to seek treatment. peripheral blood picture ,aspiration for culture and sensitivity,fine needle aspirations for cytology were requested by his dentist.

All investigations were negative but the FNA revealed fatty cells so lesion seemed to be a lipoma.Two days later after FNA,the swelling increase in size and became very tender the patient referred to our clinic.

On examination, a 5*5cm tender swelling which almost involve the right cheek ,it was firm shiny and obliterated the left nasolabial fold the patient looked ill and febrile temperature was 38.5 C'.

It was difficult to palpate a thrill or auscultate a bruit.It looked that the patient developed cellulitis. Antibiotics started immediately clindamycin300mg 6hourlyand metronidazole 500mg in addition to non steroidal antinflammatory drug were prescribed.

The patient respond well and after five days taken to the theatre for surgical incision of this lesion which seemed to be lipoma.The lesion was superficial to the buccinator, so we planned to excise it through nasolabial fold incision.

After dissections of the skin and subcutaneous tissue unexpectedly we found a network of large swollen veins which were easy to rupture producing unexpected profuse bleeding.hardly haemostais was done and wound closed.

After healing period computed tomography angiography requested and it revealed a huge vascular malformation.

Then the patient was referred to interventional radiology department for further management,but before referral palpable thrill and audible burit were both found.

DISCUSSION

AVMs are usually noted at birth but frequently misdignosed1.The pathogenesis of AVMs is not understood but it may result from errors of embryonic and fetal

development.¹ While Corinne et al suggested genetic cause², David O. and John W. proposed that AVM is not generally thought to be an inherited disorder, except in the context of a specific hereditary syndrome³

The most common site for these lesions are Intracranial, head (extracranial) and neck, extremity, truncal and visceral sites⁴.

Mulliken JB, Glowacki J. In 1982 classify vascular lesions according to cellular characteristic to Hemangiomas and vascular malformations. malformation noted at birth increase with age and can be divided to arterial which is high flow and venous, capillary and lymphatic which are low flow⁵.

AVM in the Maxillofacial region slightly more common in females than male, male-female ratio is 1:1.5. AVMs usually have an anatomic pattern as follow 69% occurred in the midface, 14% in the upper third of the face, and 17% in the lower third and the most common sites cheek, ear, nose, and forehead⁶.

Diagnosis of AVMs depends largely on History and physical examination which have an accuracy of 90% in differentiation between AVMs and vascular tumors¹.

Although computerized tomographic angiography has important role in diagnosis of AVMs, distraction angiography is the gold standard for both diagnosis and treatment planning³.

Generally AVMs treated by embolization, sclerotherapy, surgical resection and reconstruction. Feeding vessels should never be ligated or embolised proximally because the AVMs may recruit new vessels¹.

Spontaneous bleeding into the submental, bilateral sublingual, and submandibular spaces can create a "pseudo-Ludwig phenomenon," in which the tongue and floor of the mouth become elevated and cause airway compromise³.

In spite of many diagnostic tools, diagnosis of AVMs depends largely on clinical assessment both history and examination of paramount importance.

Auscultation of any undiagnosed swelling should be done to avoid unexpected disastrous scenarios.

Gupta N. et al found that sensitivity of FNAC in diagnosing oral/oropharyngeal lesions was 71.4%; specificity was 97.8% with diagnostic accuracy of 87.7%⁷.

FNA cytology has a great value in diagnosis of many conditions in oral and maxillofacial region, but sometimes misleading result may complicate both diagnosis and treatment.

REFERENCES

- 1-Jennifer J. ,John B. Mulliken. Current management of hemangiomas and vascular malformations. Clin Plastic Surg 2005;32:99-116.
- 2-Corinne M., Nielsen, Henar C. Deletion of Rbpj from postnatal endothelium leads to abnormal arteriovenous shunting in mice. Development 2014 Oct 10;141(19):3782-92.
- 3-David O., Pickett, John W. Case report of spontaneous hemorrhage in a sublingual arteriovenous malformation causing an emergent air way obstruction. J Oral Maxillofac Surg 2014;117:46-50.
- 4-Jennifer J., Marler , John B. , Mulliken. Misdiagnosed Current management of hemangiomas and vascular malformations. Clin Plastic Surg 2005;32:99-116.
- 5-Mulliken JB, Glowacki J. Hemangiomas and vascular malformations in infants and children : Classification based on endothelial characteristics. Plast Reconstr Surg 1982;69:412-22.

6-Kohout MP1,Hansen M, Pribaz JJ, Mulliken JB.Arteriovenous malformations of the head and neck: natural history and management.Plast Reconstr Surg 1998;102:643-654.

7-Gupta N,Banik T,Rajwanshi A,Radotra BD,Panda N,Dey P,Srinivasan R,Nijhawan R.Fine needle aspiration cytology of oral and oropharyngeal lesions with an emphasis on the diagnostic utility and pitfalls.J Can Res Ther 2012;8:626-9



