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Case Report

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A Case of External Ear and Submandibular Extracranial Arteriovenous Malformation

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1. Abstract

1.1. Introduction

Arteriovenous malformation (AVM) of the head and neck is a rare vascular anomaly but when present is persistent and progressive in nature due to failure of regression of primitive arteriovenous channels during 4th till 6th week gestation.

1.2. Objective

The aim of this case report is to show the progressiveness of an extracranial AVM of a patient over the course of 20 years.

2. Case Description

Encik F, 34 years old gentleman, first presented with a swelling at the left ear pinna since the age of 15 years old. Another swelling at the left cheek was also noted at 21 years old. A set of investigation was done at that time and he was diagnosed as extracranial AVM. At 33 years old, there was sudden blood spurting from left pinna and he rushed back to Hospital Shah Alam where the bleeding was arrested by compression. The whole left pinna was pulsating with post auricular, infraauricular and left submandibular pulsating mass measuring 2 x 3 cm.

Upon CT angiography Carotid, noted that the Facial branch, Maxillary branch, Posterior Auricular and Superficial Temporal branch of the left External Carotid artery appear dilated and tortuous. There is abnormal clump of dilated vessels (AVM) at the level of left submandibular and left external ear.

3. Discussion

53 individual cases of external ear AVM has been reported by various literatures. From these, it is found that the average years of AVM is 26 years old. 7 patients reported that their AVM became aggravated during puberty and 6 had histories of trauma. Meanwhile, according to Raymond et al 2015, the exact incidence of submandibular AVMs is not known but based on case series is estimated at 1 in 50000. Kohout et al. in their study also found that AVMs were present at birth in 59% of cases, in childhood 10% of cases, in adolescent 10% of cases, and in adulthood 21% of cases. In this case, the onset of the AVM was at puberty and progressed from the external ear to the submandibular level involving the EXTERNAL CAROTID ARTERY branches. Follow up for this patient may provide useful in monitoring further vessel dilatation or new AVM cranially or caudally from the branches of the external carotid artery with the external jugular vein.

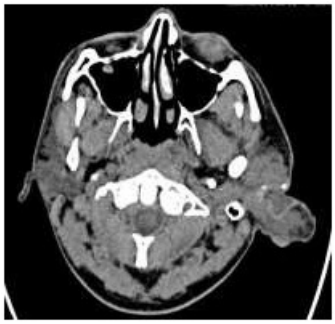

Figure 1: Arteriovenous malformation (AVM) of the head and neck

4. Conclusion

Extracranial AVM itself is a rare entity. Author was unable to find reported incidence of external ear and submandibular AVM in the same individual, however there was a reported case of infratemporal and parotid AVM. Currently there are more protruding vessels seen at the back of patient's ear and he was advised to revisit Hospital Kuala Lumpur for treatment option. Therefore, it is a sign of persistence and progressiveness of his disease.

References

1. Kim SH. Arteriovenous malformation of the external ear: a clinical assessment with a scoping review of the literature. Brazilian Journal of Otorhinolaryngology. 2017; 83(6): 683-690.