

Aneurysm Of The Internal Jugular Vein And Transverse Sinus Associated With Occipital Bone Erosion

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Citation

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Abstract

Internal Jugular Vein (IJV) aneurysm is exceedingly rare anomaly. Written data on this anomaly is rare in literature. This report presents a case of IJV aneurysm associated with transverse sinus aneurysm and occipital bone erosion.

INTRODUCTION

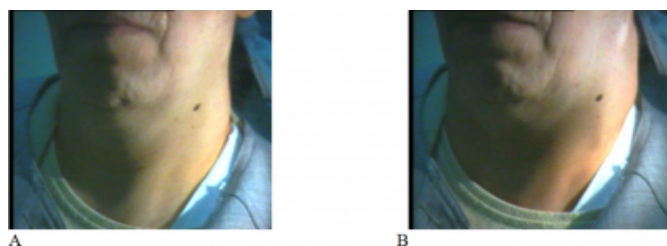
Anomalies of IJV are infrequently encountered in the literature. It has been described by various names as; phlebectasia, congenital venous cyst. IJV aneurysms usually present in childhood with asymptomatic mass in the neck which increase its size with valsalva maneuver, coughing, straining etc. We report a case of IJV aneurysm associated with transverse sinus aneurysm and occipital bone erosion, that this combination is the first in literature.

CASE REPORT

A 58 year old woman presented with non-pulsatile mass in her neck. It had been present for 3 months but the erosion on her occipital bone exists from the birth. The patient was born after normal pregnancy and delivery without any special neonatal events. Beside this she has no symptoms and no history of previous trauma or surgery. The mass increases its size with increased intrathoracic pressure (Fig. 1). The mass is located at the left lower third of her neck below the sternocleidomastoid muscle. Its size is approximately 5x3 cm.

Figure 1

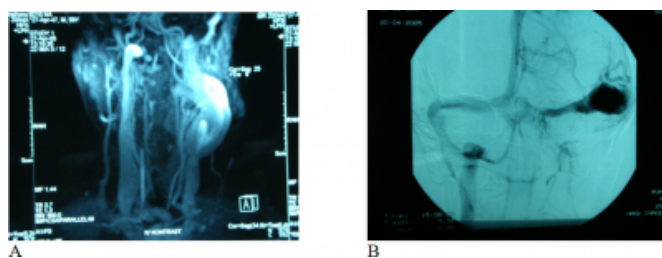
Figure 1: The patient before (A) and after (B) the valsalva maneuver



were fusiform dilatation and irregularities in left transverse sinus and transversosigmoid junction level. Filling defect seen in sigmoid sinus, jugular bulb and internal jugular vein. Cervical MRI and MRI angiography shows aneurysmatic dilatation in left transverse sinus and left internal jugular vein (Fig 2). On CT examination, a bony erosion starting from the left squamous part of the occipital bone and continuing to the occipitomastoid junction was noted and thought to be caused by the aneurysm (Fig 3).

Figure 2

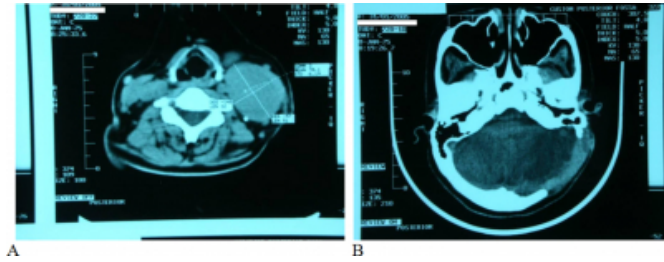
Figure 2 : Cervical MRI Angiography (A) demonstrating the left internal jugular vein aneurysm and the Digital Subtraction Angiography (B) demonstrating the fusiform dilatation at the left transverse sinus and the transversosigmoid junction level.



In her digital subtraction angiography examination, there

Figure 3

Figure 3 : Neck CT(A) demonstrating the left internal jugular vein aneurysm and the cranial CT(B) demonstrating the left occipital bone erosion.



Since the patient has no symptom except appearance and the neck mass appears only in Valsalva conditions and surgery will have high morbidity ,the patient taken into yearly follow up visits.

DISCUSSION

Venous aneurysms especially in the neck are very rare conditions. In the literature Harris first described a case of congenital venous cyst in 1928 ¹. Since then there has been few reported cases. Most of the IJV aneurysms are located at the left side and have a fusiform morphology.^{2,5}

The differential diagnosis of non-pulsatile neck masses include thyroglossal duct cysts,cystic hygroma,branchial cleft cyst,laryngocele,pharyngocele,dermoid cyst,cervical adenitis, thyroid mass, AVM, and cystic degeneration of tumors^{3,5} .Especially diagnosis of venous aneurysms should

be suspected when the mass enlarges its size with increased intrathoracic pressure. Etiology is not clear. It can be traumatic,inflammatory or congenital. ⁵Diagnosis; color duplex USG, dynamic MRI, and venography² .Mostly diagnosis is clear by USG.

Pathology; all three layers of normal vein wall are present in venous aneurysms³. But elastic and muscular layer thinning may be seen^{3,4,5} .Thrombus may or may not be present⁵.

This is the first case in the literature that have cranial bone erosion,transverse sinus and IJV aneurysm combination.

There has been no report of rupture or thromboembolic complication of IJV aneurysm so only indication for surgery is cosmetic reasons. ^{3,4}

In our case also we preferred clinical follow-up.

References

1. Harris RL. Congenital venous cyst of mediastinum. Ann Surg 1928;88:953-956.
2. Bosshardt TL,Monig MP. Congenital internal jugular aneurysm:diagnosis and treatment. Mil Med 1996;161:246-247
3. Calligaro KD, Ahmad S, Dandora R, et al. Venous aneurysms:Surgical indications and review of the literature. Surgery 1995;117:1-6.
4. Calligaro KD, Ahmad S, Dandora R, et al. Congenital aneurysm of the internal jugular vein in a pregnant woman. Cardiovascular Surgery 1995;3:63-64.
5. Spiro SA, Coccaro SF, Bogucki E. Aneurysm of the internal jugular vein manifesting after prolonged positive pressure ventilation. Head and Neck 1991;13:450-452.

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