

Pseudoaneurysm of External vein presenting as a cervical mass : a case report

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Abstract

Venous pseudoaneurysms are one of the uncommon causes of neck swellings. Among neck veins, pseudoaneurysms of the external jugular vein are extremely rare. They may be fusiform or saccular. We present a case of male who presented with a mildly tender partially compressible swelling in the left supraclavicular region, which was found to be the external jugular vein pseudoaneurysm on Doppler ultrasound and contrast enhanced computed tomography. Saccular pseudoaneurysm of the external jugular vein are uncommon and only rarely lead to serious complications. Ultrasound can allow early detection of this entity.

Introduction

Venous pseudoaneurysms are rare when compared to arterial ones.^[1-3] They have been reported in several anatomic locations in the neck, the commonest site being the internal jugular vein^[3,4]. Although fusiform cervical venous dilatations represent a frequent occurrence, Saccular venous pseudoaneurysm of the external jugular vein is a very rare entity and only a few cases have been reported in the English literature^[3]. Those in the head and neck region usually have a benign clinical course causing only pain and tenderness, as opposed to those at other locations that may lead to embolism or rupture^[2].

We report a case of a 22- years-old male with a saccular pseudoaneurysm of the left external jugular vein diagnosed on colour Doppler and CT scan.

Case report

A 22 year old male patient, a teacher by occupation, came to our radiology department for ultrasound and CT evaluation of the neck mass on left side (swelling

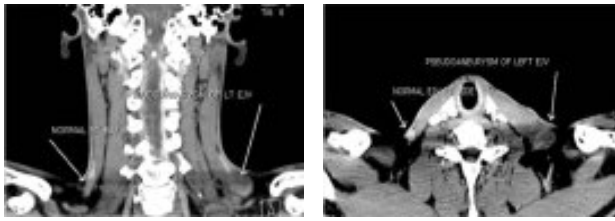
since 2 years). Initially the swelling used to appear on lying down position or while bending down and during activities like running, exercising but it reduced spontaneously. The patient had habit of cracking neck muscles and bones since years. In last 45 days, the swelling has become painful however there was no history of trauma to neck otherwise. There was no history of tingling and numbness in the hand. There was no cyanosis of the tip of the fingers. There was no history of pain even on hyperabduction of the arm nor did the swelling increase in size on this manoeuvre indicating that the swelling did not compress the neurovascular bundle of the thoracic outlet. There was no oedema the right upper limb or dilated veins over the face. There was no history of ecchymosis or discolouration of skin suggestive of rupture of external jugular vein. It indicated pseudo aneurysm had developed slowly and progressively. There was no past history of cervical lymphadenopathy or Anti Koch's Treatment (AKT) taken.

On examination there was a single 2 cm × 3 cm, mildly tender swelling, located on left side of the neck in the supraclavicular region with smooth surface and overlying normal skin. The swelling was firm in consistency, non-pulsatile, partially reducible. The swelling was not fixed to the skin and became tense on Valsalva manoeuvre. External jugular vein above the

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A. **B.**
Fig A and B shows coronal and axial section of the neck at supraclavicular region shows saccular pseudoaneurysm of left EJV.



C. **D.**
Fig C and D axial and coronal section of the neck at supraclavicular region shows bulky sternocleidomastoid muscle on left side suggestive of intramuscular hematoma.

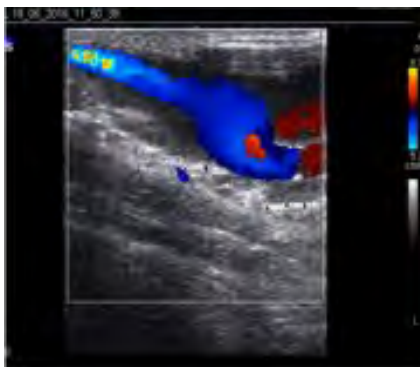


Fig E : is the colour Doppler image of the pseudoaneurysm and



Fig. F : shows the gray scale image of the pseudoaneurysm with the defect in the lateral wall of the the left EJV

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References

1. Karapolat S, Ektut B, Unlu Y (2005) Multiple aneurysms of the left external jugular vein. *Turk J Med Sci* 35:43-45
2. McCready RA, Bryant MA, Divelbiss JL, Chess BA (2007) Subclavian venous aneurysm: case report and review of the literature *J VascSurg* 45 (5) : 1080-1082
3. Drakonaki EE, Symvoulakis EK, Fachouridi A, Kounalakis D, Tsafantakis E(2011) External jugular vein aneurysm presenting as a cervical mass. *Int J Otolaryngol* 485293. Epub May 16, 2011
4. REgueiro Mira F, GalbisCaravajal JM, canto Armengod A (2002) Thoracic venous aneurysms. Clinical observation. *J CardiovascSurg (Torino)* 43(4) : 527-529
5. Al-ShaikhiA , Kay S, Laberge JM (2003) External jugular venous aneurysm: an unusual cause of a neck mass in a young child. *J PediatrSurg* 38:1557-1559
6. Lee HY, Lee W Cho Yk, Chung JW, Park JH (2006) Superficial venous aneurysm: reports of 3 cases and literature review. *J Ultrasound Med* 25(6): 771-776
7. Stell and Maran’s Textbook of Head and Neck Surgery and Oncology
8. Jatin Shah’s Head and Neck Surgery and Oncology.
9. Regueiro Mira F, GalbisCaravajal JM, Canto Armengod A. Thoracic venous aneurysms: clinical observation. *J CardiovascSurg (Torino)* 2002; 43:527–529.
10. Majeski J. Surgical repair of primary saphenous vein aneurysm of the proximal leg after initial presentation as an inguinal hernia. *Am Surg* 2002; 68:999–1002.

