EXTERNAL JUGULAR VEIN ANEURYSM - CASE REPORT

INTRODUCTION

True venous aneurysms are rarely encountered compared to arterial ones. They are not related to either age or gender. They can affect any vein, including cervical, thoracic, visceral, and lower extremities veins. Aneurismal dilatations in cervical veins are rare due to low pressure in the vena cava system. The majority of reported cases are in adults. Their natural history and management depend on their location. They could be classified into primary (congenital) and secondary (acquired lesions, mostly after trauma). Etiologic factors recognize: tumours, thoracic outlet syndromes and trauma, also seems that inflammation, degeneration and increased pressure within the system may be a possible cause of this pathology. Not more than a few (three) cases of venous aneurysms involving the external jugular vein have been described in the literature. (1-4)

CASE REPORT

In our daily surgical practice we encountered a case of external jugular vein aneurysm.

A 37 year old woman came in our surgical office accusing the onset of a cervical bilateral progressive swelling. The history revealed that the left side modification had a more progressive growth but without any symptoms. Generally the patients may experience symptoms such as tightness due to pressure, congestion, choking and pain, but this was not the case.

At physical examination we observed:
- a right side lateral cervical pseudo tumour, round, 2 cm in diameter, soft, painless,
- a left side lateral cervical pseudo tumour, ovular, 4 cm in diameter, soft, painless,
- both were mobile, non-pulsating and fluctuating mass, immobile with deglutition,
- no bruit could be detected on auscultation in lateral cervical sites.

These venous tumours are easily confused with lymphadenopathies, thyroid swelling, lymphocele, cystic hygroma, cavernous haemangioma, laryngocele, thyroglossal cyst, or some other cysts, or with arterial aneurysm.
Lab exams:

The paraclinical examinations - laboratory tests, electrocardiogram, chest and neck radiograms revealed no pathologic findings.

Venous Doppler ultrasonography – colour Doppler established the diagnosis: bilateral aneurysmal dilatation of the external jugular veins:

- right - 2 cm, fusiform image,
- left - 2.5/3.5 cm, transonic, ovular, image, with venous flux, without any signs of thrombosis,
- the deep veins of the region without modifications.

It was not necessary to submit the patient for other imaging exams, as computed tomography, magnetic resonance imaging or venography, due to the fact that Doppler ultrasound established the diagnosis.
The most feared complications are represented by pulmonary embolism, thrombophlebitis, rupture and thrombus formations. Although they occur extremely rare we decide for surgery due to the progressive enlargement in the left mass and also due to cosmetic causes invoked by the patient.

The patient was admitted in hospital where we performed, under local anesthesia, the excision of the left external jugular aneurysm. The removal of the aneurysms was relatively easily because the tumoral mass adhesion to the surrounding tissue was slight.
The distal and proximal ends of the veins were ligated. It was not necessary to restablish the venous continuity of left external jugular vein making a by-pass.

Microscopic examination of the surgical specimen in these cases may show a wide spectrum of findings ranging from normal venous wall to those characteristic of phlebectasia - thinning of the wall with loss or absence of smooth muscle layer in media and replacement with a fibrous layer hypertrophy in addition to deficiency and disruption of the architecture of the elastic layer; absence of the media and adventitia, endophlebosclerosis, endophlebohypertrophy.

In our case the histological examination has confirmed the presence of a true venous aneurysm:
- a very enlarged vein, with a very thick wall, without any limitation among layers, a very obvious oedema
- in addition in the perivenous conjunctive tissue we found a lot of nervous fibres and small arteries,
- we found also muscular tissue and arteriole.

The postoperative evolution was favourable, with healing „per primam”. The patient was discharged from the hospital the next day. In the follow-up period the patient had no other local or general modifications.

CONCLUSION:
We support the surgical treatment and prophylactic resection of the aneurysm because of:
- the existence of the risk of thrombosis with tromboembolic complications,
- possible complication of rupture,
- for cosmetic and aesthetical reasons, according to preference of the patient.

References: