CASE REPORT

Cavernous Hemangioma Mimicking Anterior Jugular Vein Phlebectesia

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SUMMARY

Cavernous hemangioma is a vascular tumor composed of large dilated blood vessels and containing large blood-filled spaces. The formation is due to dilation and thickening of the walls of the capillary loops. Most cavernous hemangiomas present at birth or soon after. On the other hand, jugular phlebectasia is an abnormal benign sacculofusiform dilatation of jugular veins. It should be considered as one of the differential diagnosis of neck swelling. Majority of the reported cases occurred in a young child. We reported a case of an elderly woman who was diagnosed clinically as anterior jugular vein phlebectesia. Histologically the mass turned out to be a cavernous hemangioma.

KEY WORDS:
Lateral neck mass, Anterior jugular vein, Cavernous hemangioma

CASE SUMMARY

A 60 year old woman presented to the ORL clinic for asymptomatic swelling on the left side of the neck of six month duration. The swelling had increased in size over that period of time but she did not notice any association of the size with straining. There was no history of trauma, local or systemic infection and surgical intervention. She had no dysphagia, hoarseness or shortness of breath.

Examination revealed a soft cystic mass on lower left of the neck adjacent to a prominent left anterior jugular vein. It measured approximately 2.0 x 2.0cm (Figure 1). The swelling increased in size and became slightly bluish on Valsalva maneuver. There was no abnormal pulsation or bruit. Based on the clinical assessment, the possible differential diagnosis included a jugular phlebectasia, laryngocele or a neck cyst.

A plain x-ray of the neck with and without Valsalva maneuver showed no visible air and therefore ruled out a laryngocele. Doppler ultrasound scanning was performed and revealed a cystic lesion measuring 3.0 x 0.6 x 1.7 cm seen within the subcutaneous tissue anterior to the caudal end of left strenocleidomastoid muscle. However no colour flow was noted within this cyst. Thus a conclusion of simple neck cyst was made on ultrasonographic findings.

Being uncertain that the mass could be only a simple neck cyst or jugular phlebectasia, the lesion was explored under general anaesthesia. A superficial saccular cystic mass was found arising from left anterior jugular vein (Figure 2).

The anterior jugular vein was ligated at both ends and the swelling was excised completely. The post-operative period was uneventful. The patient was discharged on the next day. Follow-up in the clinic after one month showed the wound healed well. There was no recurrence of swelling or any skin changes noted at the site of operation.

The histopathological examination of the resected tissue showed fibrofatty tissue containing many thick walled blood vessels (Figure 3). Some of them were thrombosed and had a thin septae across. Based on these features a diagnosis of cavernous hemangioma was made.

DISCUSSION

Majority of the patients with jugular phelebectesia presented with history of neck mass which is apparent on straining. This presentation was noted in the examination of our patient whereby Valsalva maneuver expanded the size of the lesion. Laryngocele, pharyngeal pouch, branchial cysts and cavernous hemangiomas should be considered in the differential diagnosis[1].

Jugular phlebectasia refers to an abnormal dilatation of the neck veins. Phlebectasia may affect any vein in the neck in the following sequence; Internal jugular, External jugular, Anterior jugular and the Superficial communicans[2]. Cavernous hemangioma should be considered in the differential diagnosis because of the nature of the mass which increased with straining, bluish in colour and soft and cystic on palpation. However, they typically develop by the age of one in children and involutes by 5 or 6 years of age[3].

Ultrasonography is a good diagnostic modality for the diagnosis of internal jugular venous ectasia. Color Doppler ultrasonography demonstrates the turbulent flow in jugular venous ectasia[4]. It is the preferred non invasive method of investigation which should demonstrate an echo-free space which changes on Valsalva maneuver[5], and also be able to demonstrate the blood flow in either both phelebctesia or cavernous hemangioma, which in our case was negative.

For phlebectesia, many authors advise a conservative approach based on reassurance, but due to cosmetic reasons these lesion have been excised with ligation of the jugular vein with no gross side effect. Management of anterior jugular phlebectasia is much simpler when compared to that of internal jugular phlebectasia and usually a simple surgical excision is all that is required[1].

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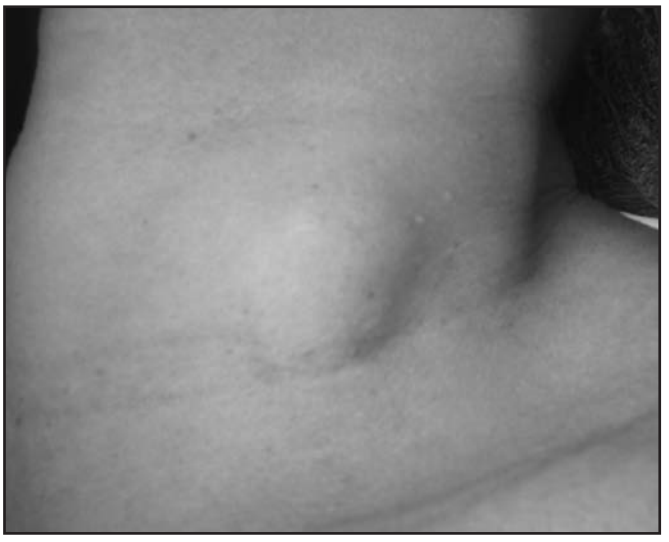

Fig. 1: The mass appeared bluish and enlarged on Valsalva maneuver. The dilated anterior jugular vein was not clearly seen in this picture.

Fig. 2: The bluish mass attached to the anterior jugular vein.

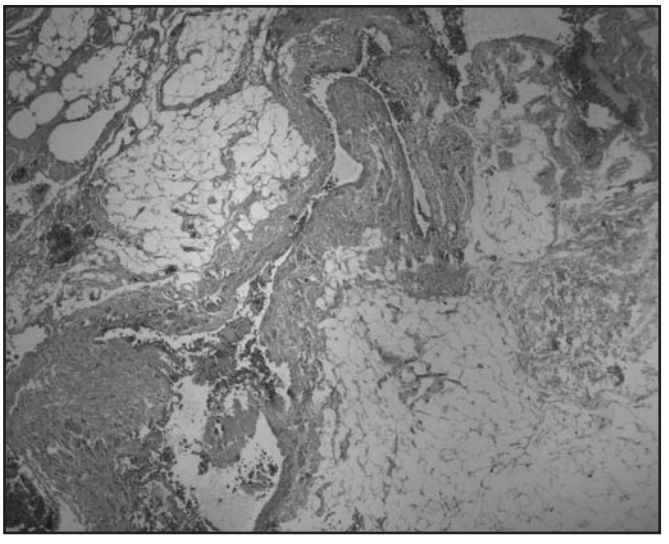

Fig. 3: Dilated Thick walled blood vessel containing blood and surrounded by fibrofatty tissue; H&E x4.

As for cavernous hemangioma, the management also is usually conservative. The lesion, which usually present at birth or soon after birth, regresses by itself with time. Surgical intervention is indicated for a lesion that causes compromises to the quality of life or it is cosmetically unacceptable.

As in this case, preoperatively, there was no definite diagnosis. Clinically it was an anterior jugular phlebectesia, radiologically concluded as a simple cyst and post operative histological examination confirmed that it was a cavernous hemangioma.

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