



INTERNAL JUGULAR PHEBECTASIA IN CHILD; NOW YOU SEE IT NOW YOU DON'T

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INTRODUCTION

- ✓ **Internal jugular phlebectasia (IJP)** is an important vascular anomaly that causes neck mass but infrequently diagnosed¹. However, with advancement of non-invasive radiological modalities and diagnostic techniques, IJP is gaining its recognition in medical practice.
- ✓ Being its presentation of unilateral or bilateral neck swelling, the anatomical location of the swelling carries various benign and even malignant probable diagnosis, depending on the age of presentation².
- ✓ The incidental finding of compressible right neck swelling or mass that becomes prominent and apparent during straining, shouting and sneezing could lead to the differential diagnosis of IJP, together with laryngocele and superior mediastinal mass cyst³.

CASE REPORT

A 6-year-old girl with no known medical illness presented with intermittent right neck swelling that was accidentally noticed by the parents. They described it as oblong in shape and static in size. The neck swelling becomes obvious when the child is actively playing, shouting, coughing, straining, and sneezing.

On examination, her neck is symmetrical bilaterally without obvious mass at rest or skin abnormality. Upon cough and strain, a 4 x 3 cm mass intermittently appears over right side of neck. The mass bulged from the right sternomastoid muscle and extending up to the right anterior triangle of the neck. It is oblong in shape and soft on palpation, not tender and no pulsation or bruit felt.

The transillumination test was negative and other head and neck examination was unremarkable. Ultrasonography of neck with color Doppler was done and managed to detect ectasia of right internal jugular vein. Significant dilatation of the vessel without tortuosity was observed upon straining and Valsalva maneuver, that measured around 5 times of the vessel diameter during at rest. Diagnosis of right IJP was made and the parent was advised for conservative management as the child is asymptomatic.



Figure 1: Oblong right neck swelling on Valsalva manoeuvre

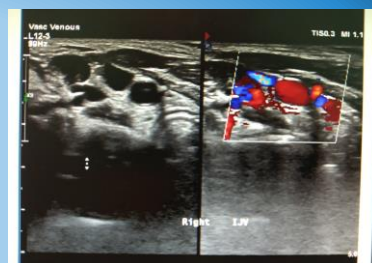


Figure 2: Ultrasound findings shows marked increase in size of right internal jugular vein during Valsalva manoeuvre

DISCUSSION

- ❖ IJP refers to congenital dilatation of internal jugular vein, without tortuosity or varix. It is also known as venous congenital cyst, venous ectasia or essential venous dilatation¹.
- ❖ The neck mass which is due to IJP is intermittently present on straining, cough, increased intrathoracic pressure and Valsalva maneuver. It is compressible and soft without tenderness, pulsation or tortuosity. History of neck trauma or invasive neck procedure including operation and mechanical neck compression should lead the diagnosis towards IJP. It is also can be idiopathic in origin.
- ❖ Ultrasonography would be the investigation of choice to diagnose IJP. Together with color doppler flow imaging, the increasing diameter and cross-sectional area (CSA) of internal jugular vein during Valsalva maneuver could be demonstrated. It is also helpful to detect thrombus or leaking of the IJP. Internal jugular vein AP diameter more than 15mm is diagnostic for IJP³.
- ❖ The management is mainly conservative and observational. In rare cases of progressive neck swelling and symptomatic patients, surgical intervention would be needed which are surgical excision or venorrhaphy⁴.

CONCLUSION

This case emphasises the necessity of decisive investigation and prompt diagnosis in any case presentation of neck swelling. The primary care practitioners play great role to assess patient's presentation holistically and channel the patient towards appropriate investigation to reach the correct diagnosis.

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