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A Case Report on Internal Jugular Vein Phlebectasia

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Introduction

Internal jugular phlebectasia (IJP), is a rare benign anatomical variant that presents as a neck mass Other terms include venoma, venous cyst, venous aneurysm, or venous ectasia. The first published case was in 1929 but was only studied further 23 years after (Gerwig, 1952). It usually presents in the first decade of life as a nontender mass on the lateral neck, often unilateral, notable during shouting, crying, coughing, or other maneuvers that involve an increase in intrathoracic pressure.

This condition must be identified from other more common causes of neck masses such as laryngocele, cystic hygroma, branchial cyst, and superior mediastinal mass. Treatment is geared towards observation in the pediatric population and in the absence of complications. Surgical intervention such as endovascular angioplasty, surgical wrapping, and endoscopic resection, are done for cosmesis or if there is thrombosis.

Objectives

1. To present a case of an Internal Jugular Phlebectasia in the Philippines; and

1. To discuss the different diagnostic and imaging modalities that may help in the diagnosis and management of internal jugular vein phlebectasia

Case Summary

A 4-year-old male from Quezon City, was brought in due to right neck swelling. He was apparently well until 1 week prior to consultation, mother noted swelling on the right neck while the patient was crying. Swelling was also observed when he was coughing, or straining but not be present at rest. No other associated symptoms.

On physical examination, he was noted to be conscious, coherent, ambulatory, and not in distress. He had stable vital signs (BP: 90/60, HR 90 bpm, RR 23 cpm, Temp 36.1C and O2 saturation of 98% at room air), with good perfusion, full & equal pulses; with weight of 16kg, Height of 99cm, no stunting and no wasting. No palpable neck mass at rest, no overlying skin changes, however when asked to shout, a solitary nontender compressible 3x3cm soft mass along the sternocleidomastoid on the right lateral neck was appreciated. No bruit noted on auscultation. Other physical examination findings were unremarkable.

Findings & Follow-up

Neck masses in children can be differentiated based on consistency, whether cystic or solid. The patient presented with a cystic lesion. Differentials can be narrowed down based on the location of cystic lesion, whether midline or lateral. He presented with a lateral cystic lesion, differentials are then narrowed down to branchial cyst, lymphangioma, or vascular malformation, such as venous phlebectasia. In evaluating neck masses, ultrasonography is the initial imaging of choice.

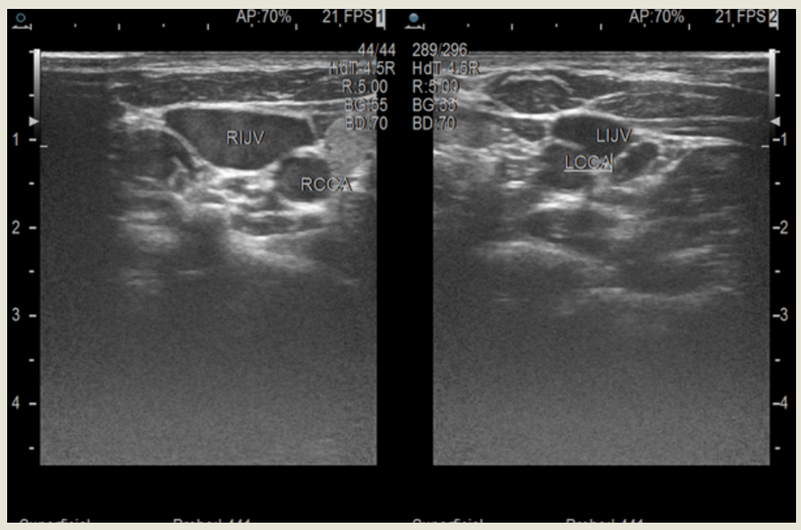

Figure 1. Neck ultrasound showing comparison between right internal jugular vein (Left, arrow) and left internal jugular vein (Right,arrowhead)

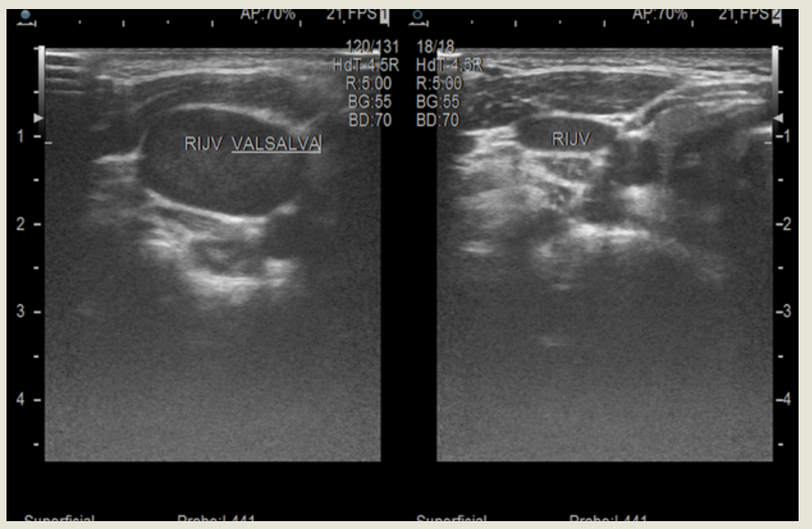

Figure 2. Neck ultrasound showing the right internal jugular vein during Valsalva (L) and at rest (R)

Conclusion

Internal jugular phlebectasia is a consideration in a child presenting with unilateral painless neck mass noted during maneuvers with increased intrathoracic pressure. Proper history taking and physical examination with the aid of diagnostic and imaging modalities will help in identifying this benign entity. Etiology is still yet to be elucidated. Available literature favors observation over surgical intervention in the pediatric age group, which is usually reserved for cosmesis or in the presence of complications, such as thrombosis. Further studies and reporting of cases regarding this rare condition are recommended, especially in the local setting.

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