Unilateral internal jugular phlebectasia

A 10-year-old boy had been followed up regularly for mild asthma at the Department of Paediatrics of the Kwong Wah Hospital. On the follow-up visit in March 1999, his mother said that she had noticed an abnormality over the boy's neck. Physical examination revealed no distress and no abnormality at rest (Fig 1). There was a swelling, however, when the intrathoracic pressure was increased—for example, by performing the Valsalva manoeuvre (Fig 2). The swelling over the lower half of the anterior triangle on the right side of the neck was non-tender and did not transilluminate. Auscultation showed no venous hum or bruit. A provisional diagnosis of abnormally dilated



Fig 1. Normal appearance of neck at rest



Fig 2. Unilateral right-sided internal jugular phlebectasia (arrow) during the Valsalva manoeuvre

right internal jugular vein or jugular phlebectasia was made. Ultrasonography confirmed that the proximal right internal jugular vein was abnormally dilated when compared with the left internal jugular vein; the difference was amplified when the intrathoracic pressure was increased. Doppler ultrasonography showed that the amplitude of phasic change was more prominent on the right side at rest, and it decreased when the Valsalva manoeuvre was performed.

The most common cause of a neck mass that increases in size with the Valsalva manoeuvre is laryngocele.¹ Differential diagnoses include pharyngeal pouch, cavernous haemangioma, and jugular phlebectasia. Venous dilatation was first reported in 1928,² and phlebectasia was the term used by Gerwig³ to describe an abnormal fusiform dilatation of the vein. The cause is unknown. Diagnosis is confirmed by ultrasonography and Doppler ultrasonography, and both internal jugular veins should be examined. Because the mean normal difference in diameter is 0.4 cm (standard deviation, 0.3 cm), a difference of up to 1 cm is still within the normal range.⁴ Parents should be reassured of the benign nature of the diagnosis. Surgical treatment is not recommended.

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