Unusual suprasternal mass
Masa supraesternal inusual

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A girl aged 5 years presented with a suprasternal mass that appeared on crying starting 10 days prior, which had not been observed before, with no associated symptoms or previous history of disease.

In the physical examination, the Valsalva manoeuvre revealed a noncompressible suprasternal mass measuring 5 × 4 cm that disappeared at the end of the manoeuvre (Figs. 1 and 2, Appendix B, Video in supplemental material).

Cervical masses require early and accurate diagnosis because they may be signs of severe disease. This case is atypical and rare, as the mass appeared intermittently in the context of increasing intrathoracic pressure. This narrowed down the potential diagnoses: apical lung herniation (compressible, crepitus), laryngocoele (adults, possible stridor or dyspnoea), jugular phlebectasia (compressible and usually lateral) and thymic herniation (suprasternal, more frequent between ages 3 and 5 years, when the thymus is largest, not compressible, silent on auscultation).

Sonography is the gold standard for imaging and usually sufficient. In this case, the ultrasound examination detected superior herniation of the thymus (Fig. 3). This quick and safe diagnosis made other procedures involving radiation, biopsy or surgery unnecessary.

Figure 1 Frontal view. Left: no evidence of a suprasternal mass with the patient at rest. Right: appearance of a suprasternal mass with performance of the Valsalva manoeuvre, which did not cause pain, aphonia, dysphagia or dyspnoea.

Since the patient was asymptomatic and this type of herniation tends to resolve as the size of the thymus decreases, there was no need for surgical resection or any other treatment.

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Figure 2 Lateral view of the suprasternal mass during the Valsalva manoeuvre. The mass was not compressible, there was no crepitus and was silent on auscultation.

Figure 3 Ultrasound image of the suprasternal region during the Valsalva manoeuvre. Top: axial plane. Bottom: sagittal plane. Both show thymic tissue with normal sonographic characteristics with suprasternal herniation (white arrows).

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:https://doi.org/10.1016/j.anpedi.2023.03.007.

References