

# Odynophagia and neck pain after exercise

Catarina Faria, Inês Medeiros, Fábía Carvalho, Ana Antunes

Pediatric Department, Hospital de Braga, Braga, Portugal

**Correspondence to**  
Dr Catarina Faria,  
catmagalhaesfaria@gmail.com

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## DESCRIPTION

A previously healthy, non-asthmatic, non-smoker, 16-year-old male came for medical attention because of odynophagia and pain located at anterior cervical area and upper retrosternal area, increasing with swallowing and deep breathing, that begun after physical exercise at gymnastic class. The adolescent also mentioned a felling of air bubbles running up and down that area. There was no history of local trauma. He referred stuffed nose and mild cough but no other respiratory complaints or fever. Physical examination was unremarkable, with normal auscultation and no alterations on cervical and thoracic examination. Lateral soft tissue neck X-ray revealed free air in retropharyngeal space (figure 1, arrows). Chest X-ray showed a small amount of air in the upper mediastinum. Blood count was normal, and C reactive protein was negative. Mycoplasma pneumoniae IgM was negative. The patient was treated with high concentration oxygen and oral

analgesia. The next day, he only referred mild pain when coughing. Control neck and chest X-rays showed residual air on retropharyngeal space and no air on mediastinum, respectively. He was discharged with recommendation to avoid exercise and physical efforts for the next week as well to avoid tobacco smoke. He was re-evaluated 1 week later and was symptom free. Neck and chest X-rays were normal. After 1 month, he remained with no symptoms and with no abnormal findings on neck and chest X-rays, including pleural effusion.

Spontaneous pneumomediastinum (SPM) is a rare, usually benign and self-limited entity.<sup>1</sup> Valsalva manoeuvre (eg, induced by physical exercise) can be a trigger. Typical symptoms include dyspnoea and retrosternal pleuritic pain.<sup>2</sup> The authors want to emphasise the fact that SPM can present with head and neck complaints, with less obvious respiratory symptoms. SPM with retropharyngeal emphysema is rare but should not be forgotten in differential diagnosis of odynophagia and neck pain, as it can be complicated with upper airway obstruction in punctual cases.<sup>2</sup>



**Figure 1** Free air in the retropharyngeal space (arrows).

## Learning points

- ▶ Spontaneous pneumomediastinum presenting as retropharyngeal emphysema is a rare entity that requires a high degree of suspicion.
- ▶ Lateral soft tissue neck X-ray is a fundamental tool on making this diagnosis.
- ▶ Prognosis is usually good with conservative treatment.

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