

Sore Throat as the Herald of Spontaneous Pneumomediastinum

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To the Editor,

A 16-year-old male presented to the hospital with sudden-onset symptoms, including a sore throat that developed while at rest, accompanied by neck, shoulder, and upper abdominal pain that had developed 10 hours prior to arrival. He had no history of trauma or notable medical records. A thorough physical examination revealed no apparent abnormalities in the neck or larynx, but palpable crepitus was detected in both necks.

Chest radiography (Fig. 1) ruled out pneumothorax, showing clear lungs, pneumomediastinum (indicated by arrows), and emphysema in the neck and chest-abdominal regions. Computed tomography of the chest confirmed the presence of pneumomediastinum (arrows) and emphysema in the lower neck and bilateral chest walls (Fig. 2). The diagnosis of concomitant soft tissue emphysema and spontaneous pneumomediastinum was established. The patient was discharged five days after receiving analgesics and oxygen therapy, with subsequent chest radiographs confirming complete resolution of the pneumomediastinum.

Spontaneous pneumomediastinum is an exceedingly rare condition in pediatric patients distinguished by the existence of air within the mediastinum without any previous surgical procedures, trauma, or medical interventions, with an estimated incidence of approximately 1/8000 to 1/15,000, primarily affecting young males¹. Common predisposing factors for spontaneous pneumomediastinum include asthma, cough, vomiting, and smoking^{1,2}. Notably, a sore throat is observed as a symptom in only 13.5% of cases¹. Previous research has hypothesized that sore throats may result from excessive emphysema expanding into the retropharyngeal space, thereby stimulating the pharyngeal nerve plexus³. This case highlights the importance of conducting a comprehensive physical examination on patients presenting with sore throat, as the symptoms of this condition frequently coincide with those of respiratory tract infections, leading to potential misdiagnoses. Identifying subcutaneous emphysema in the cervical region during a clinical examination can significantly contribute to an accurate diagnosis of this rare medical condition. While most cases of spontaneous pneumomediastinum have a self-limiting nature and a good prognosis, there are still instances of serious complications, such as tension pneumomediastinum⁴. We anticipate that this case report will enhance healthcare professionals' understanding of spontaneous pneumomediastinum in the pediatric population, highlighting the importance of a thorough evaluation. This information could potentially help reduce misdiagnoses of this uncommon condition.

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Ethical Approval

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Competing Interest for all authors

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Contributors' Statement

YS.C. and SY.H. all conceived, wrote, edited, and approved the final version of this short report.

Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

Figure legends

Fig. 1 Chest radiography showing pneumomediastinum (indicated by arrows) and soft tissue emphysema.

Fig. 2 Marked pneumomediastinum (arrows) with emphysema in bilateral chest walls and the lower neck as observed on chest computed tomography.



