



Figure 1. Initial CXR showing large air lucent area of the left hemithorax (black arrow).



Figure 2. HRCT showing large air space within the left hemithorax (orange arrow), septations particularly inferiorly and tip of the intercostal drain is within the large air space peripherally (blue arrow). Axial (a) and coronal (b) views.

Discussion

Giant bulla, giant bullous emphysema, or vanishing lung syndrome is well reported in the literature [2,3]. By definition it occupies more than a third of the hemithorax [3,4]. It is commoner in men and smokers and onset is usually, insidious with progressive dyspnea over several months [5]. Less frequent associations include alpha-1 antitrypsin

deficiency, drug use, and connective tissue disease [3]. The natural history is one of progression with worsening breathlessness. Bullae can rupture resulting in pneumothorax as an acute presentation. They can also become infected [6]. Some improve with medical management. Surgery can be considered for symptomatic patients with significant functional impairment or when complications arise.

In general, with bullae, a concave lung surface is seen [4]. However, this is not always true as noted in this case where the bulla appeared as a crescent-shaped outline on CXR, leading to diagnostic uncertainty.

Some of the features of this case: the patients' youth, absence of lung disease, and the appearance of the CXR favoured a pneumothorax. The history and clinical presentation though were slightly incongruent. With the benefit of hindsight, one could argue that the year's history of breathlessness favored a less acute diagnosis. Early CT imaging would have helped avoid unnecessary pleural intervention. It also raises the question of whether we overemphasize the importance of the size of pneumothorax on imaging as a guide to intervention. New studies have shown that conservative management, in select groups with moderate to large spontaneous pneumothorax is noninferior to intervention, leading to fewer adverse events [7].

Conclusion

Bullae can mimic pneumothorax. Distinguishing between the two can be difficult and may lead to inappropriate initial management. The patient may not always have the typical phenotype and risk factors associated with bullae, as noted in this case. A high index of suspicion is necessary especially when clinical findings do not correlate with CXR appearance. Early CT imaging will prevent unnecessary pleural interventions and adverse events and aid in timely referral to the surgical team.

List of Abbreviations

CT	Computerised Tomography
CXR	chest X-ray
BMI	Body Mass Index
HRCT	High-Resolution Computerised Tomography
VATS	Video-Assisted Thoracic Surgery

Conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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Consent for publication

Verbal consent was sought from the patient for publication.

Ethical approval

Ethical approval is not required at our institution to publish an anonymous case report.

Author's contribution

Dr Lydiya Thomas: Specialty registrar involved in clinical care and chest drain insertion, concept and design of the case report, drafted the manuscript, final approval of the version to be published.

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Summary of the case

1	Patient (gender, age)	Male, 32-year-old
2	Final diagnosis	Giant bulla
3	Symptoms	Persistent breathlessness, left chest wall pain, and “crackling” sensation
4	Medications	Nil
5	Clinical procedure	Multiple chest drains followed by VATS.
6	Specialty	Respiratory, cardiothoracic