Acute epiglottitis complicating an emphysematous abscess

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A 32-year-old man presented to the emergency department with a 2-day history of nonproductive cough, fever, severe sore throat, odynophagia, and dysphagia. A chest radiograph showed no significant finding, but the lateral view of the neck demonstrated “vallecula” and “thumbprint” signs (Figure 1). Significant laboratory findings were a white blood cell count of 22,000/μL with 93% neutrophils and an elevated C-reactive protein at 51.6 mg/L (49.1 nmol/L). Direct laryngoscopy revealed a swollen epiglottis (Figure 2). The neck computed tomographic (CT) scan demonstrated a swollen epiglottis with air bubbles in the heterogeneous lesion consistent with acute epiglottitis complicated by an emphysematous abscess (Figure 3).

Acute epiglottitis is a bacterial or viral infection of the supraglottic structures that can lead to upper airway obstruction, although this is rare in adult cases.1–3 Clinical manifestations include fever, sore throat, muffled voice, dysphagia, odynophagia, drooling, dyspnea, and stridor.1–7 Emphysematous abscess is rare, with an incidence of 0 to 3%.1,6 Vallecula and thumbprint signs on the lateral view of the neck should aid in diagnosing acute epiglottitis. CT can assess the extent of the disease and identify possible complications. Direct laryngoscopy will show the adjacent structures of epiglottis. The most common pathogen is Haemophilus influenzae type B in children and Streptococcus pneumoniae in adults, but positive rates of throat swab and blood cultures are uncommon.1–7

Although radiologic studies demonstrated an emphysematous abscess in this patient, medical treatment was initiated without intubation because there were no signs of respiratory distress.

Competing interests: None declared.

Keywords: acute epiglottitis, computed tomography, emphysematous abscess
REFERENCES


