

IMAGES IN EMERGENCY MEDICINE

Trauma

A boy with sore throat and chest pain

Hisataka Ominato MD^{1,2}  | Takumi Kumai MD, PhD²  | Ryo Ota MD, PhD¹ |
Miki Takahara MD, PhD²

¹Department of Otolaryngology, Japan Community Health Care Organization Hokkaido Hospital, Sapporo, Japan

²Department of Otolaryngology–Head & Neck Surgery, Asahikawa Medical University, Asahikawa, Japan

Correspondence

Takumi Kumai, MD, PhD, Department of Otolaryngology–Head & Neck Surgery, Asahikawa Medical University, 2-1-1-1, Midorigaoka-Higashi, Asahikawa, 078-8510, Japan.

Email: t-kumai@asahikawa-med.ac.jp

1 | PATIENT PRESENTATION

A 16-year-old boy visited our hospital with complaints of sore throat and chest pain one day after a baseball hit his neck. Physical examination did not reveal cervical swelling and subcutaneous emphysema. Laryngeal edema, pharyngeal injury, and vocal cord paralysis were not observed in the endoscopic examination. Radiography revealed air leakage in the paratracheal lesion (Figure 1). Computed tomography revealed cervical emphysema and pneumomediastinum (Figure 2). The patient was treated with sulbactam sodium and ampicillin sodium without oral feeding. Chest radiography revealed that cervical emphysema

and pneumomediastinum had resolved 7 days after the admission, and the patient resumed oral feeding without any complications.

2 | DIAGNOSIS

2.1 | Traumatic cervical emphysema and pneumomediastinum

Cervical emphysema and pneumomediastinum usually manifest as cervical swelling, subcutaneous emphysema, chest pain, dyspnea, and

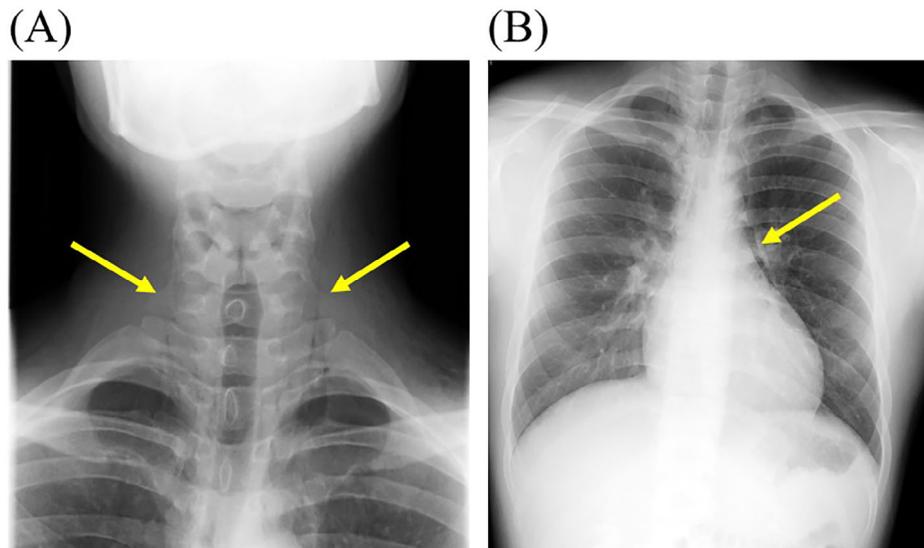


FIGURE 1 (A) Neck radiography shows air leakage in the paratracheal lesion (arrow). (B) Chest radiography shows air leakage in the mediastinum (arrow).

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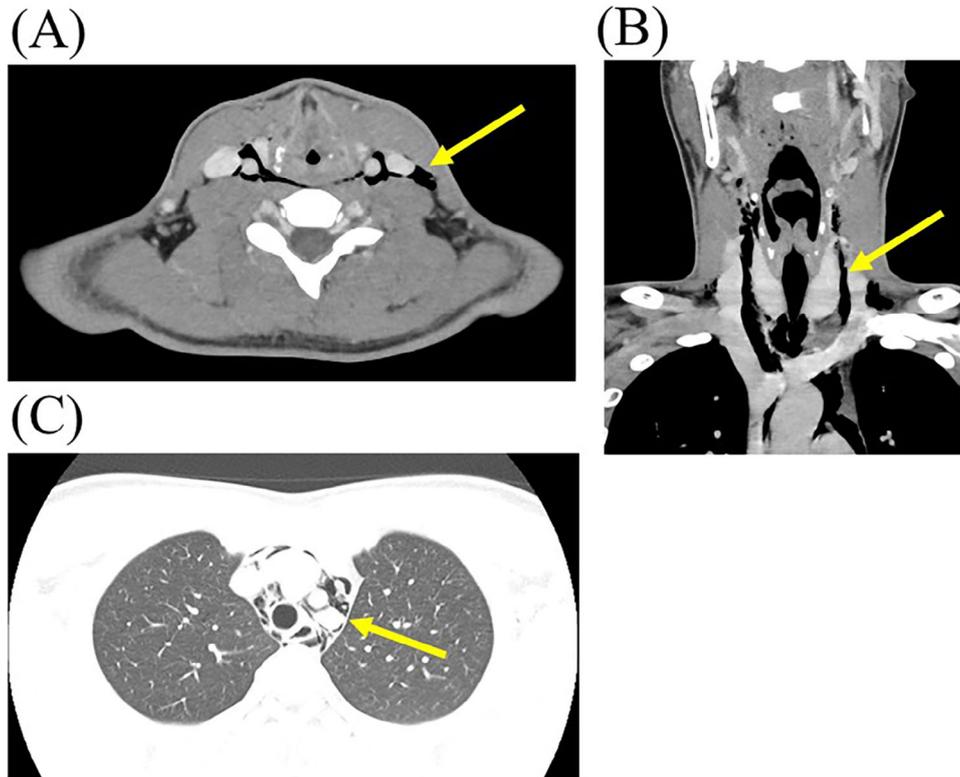


FIGURE 2 (A) Computed tomography shows cervical emphysema (arrow). (B) Computed tomography shows cervical emphysema and pneumomediastinum (arrow). (C) Computed tomography shows pneumomediastinum (arrow).

sore throat.¹ Ear, nose, throat, or dental surgery may cause traumatic cervical emphysema and pneumomediastinum.² Laryngeal injury is relatively rare, accounting for less than 1% of all traumatic injuries.³ Laryngeal injury is graded according to the Schaeffer classification system.³ This case was type 1 (minor hematoma of endolarynx or fracture less laceration).³ Although emphysema can be easily diagnosed by computed tomography, radiological examination may not be performed to examine patients with relatively minor symptoms. Mediastinal emphysema should be included in the differential diagnosis of sore throat and chest pain, even in the absence of abnormal findings in physical examination.

ORCID

Hisataka Ominato MD  <https://orcid.org/0000-0003-4826-9829>

Takumi Kumai MD, PhD  <https://orcid.org/0000-0002-3411-671X>

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