Title
Images in Emergency Medicine: Spontaneous Pneumomediastinum

Permalink
https://escholarship.org/uc/item/51j5x84z

Journal
Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 9(4)

ISSN
1936-900X

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Publication Date
2008

Peer reviewed
Spontaneous Pneumomediastinum

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Spontaneous pneumomediastinum (SPM) is an uncommon condition presenting in approximately one in 1,000 to one in 40,000 ED referrals.1,2,3 Young patients with SPM typically present with a history of asthma or recent inhalation of cocaine, methamphetamine, ecstasy, marijuana or hydrocarbons.4,5,6,7 Other causes include barotrauma in asthmatics and COPD patients, rapid ascent in scuba divers, valsalva maneuvers, vomiting, infections, blast injuries and iatrogenic injuries from endoscopy or surgery.8 The most common presentation is nonspecific pleuritic chest pain with dyspnea. Potential life-threatening etiologies include esophageal rupture and tension pneumothorax, but these are historically evident at presentation.9-12 Because a subset of patients with this finding have significant pathology, extensive workups are often necessary. Treatment is generally limited to observation, with the SPM typically reabsorbing over a period of one to two weeks without intervention and only rare recurrence.13

Figure 1. Lateral soft tissue neck illustrating retropharyngeal free air.

Figure 2. PA CXR showing pneumopericardium and free air in cervical soft tissues

Figure 3. CT upper thorax with pneumomediastinum
REFERENCES