An Uncommon Cause Of Spontaneous Pneumomediastinum And Subcutaneous Emphysema

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Introduction:
Spontaneous pneumomediastinum is caused by elevated intra-alveolar pressures that trigger alveolar rupture, often leading to subcutaneous emphysema.

We present a case of spontaneous pneumomediastinum and subcutaneous emphysema in a 79 year-old gentleman with pneumonia but no pre-existing lung disease.

This case highlights spontaneous pneumomediastinum as a rare complication of pneumonia.

Case report:
- 79 year-old gentleman admitted with shortness of breath, pleuritic chest pain and non-productive cough.
- Inflammatory markers were raised and chest X-ray showed consolidation
- The patient was treated as aspiration pneumonia with intravenous antibiotics
- After 3 days of admission, the patient became acutely tachycardic and tachypnoeic with increasing oxygen requirements
- He developed extensive subcutaneous emphysema identified on chest X-ray

Discussion:
- Spontaneous pneumomediastinum usually follows a benign course and self-resolves conservatively
- Previous cases of pneumomediastinum have been secondary to pneumonia have been associated with rare organisms (e.g. P. jiroveci in immunocompromised patients)
- Significant pneumomediastinum can occur due to tracheobronchial rupture, oesophageal perforation, mediastinitis and pneumothorax
- Complications may include airway compression and tamponade, sometimes requiring interventions such as subcutaneous needle drainage, chest drain insertion, Video-Assisted Thoracoscopic Surgery (VATS) or thoracotomy

References: