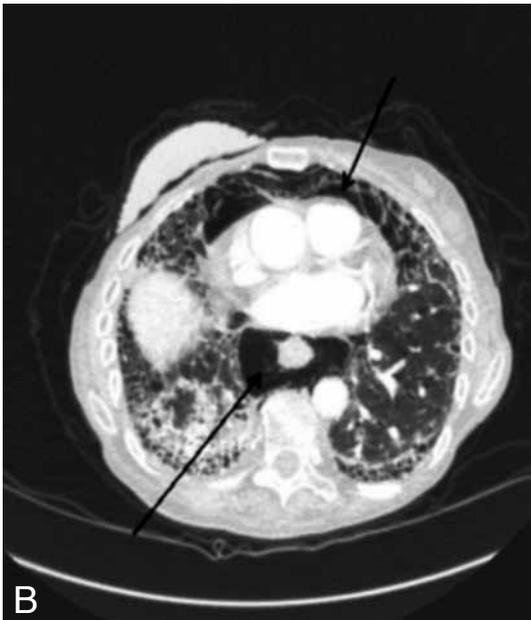


IMAGES IN CLINICAL RADIOLOGY



Spontaneous pneumomediastinum: a rare complication of idiopathic pulmonary fibrosis

W.Y. Lee, S. Faruqi, J. Kastelik¹

An 89-year-old woman with idiopathic pulmonary fibrosis (IPF) and a previous right mastectomy and implant for breast cancer presented with worsening breathlessness. There was no history of cough, haemoptysis, chest pain or fever. The chest radiograph (CXR, Fig. A) showed extensive fibrotic changes in both lungs consistent with the known diagnosis of IPF. A computerised tomography (CT) scan of the thorax revealed marked pneumomediastinum (black arrows) extending throughout the length of the mediastinum (Fig. B). No subcutaneous emphysema was noted and no obvious cause for the pneumomediastinum was identifiable. There was no history of trauma or evidence to suggest pulmonary or mediastinal infection from gas-forming organisms. There was also no recent history of tracheobronchial or oesophageal interventions and a barium swallow excluded an oesophageal rupture. A diagnosis of spontaneous pneumomediastinum (SPM) was made. The patient was managed conservatively. Her dyspnoea gradually improved and she was discharged home.

Comment

SPM is the presence of air in the mediastinal cavity in the absence of an obvious causative condition. SPM in association with pulmonary fibrosis is uncommon. Chest pain in association with breathlessness is the most common presentation, which in the context of severe IPF can be potentially life threatening. The most common finding is subcutaneous emphysema, which was absent in our patient. Frequent violent cough causing rupture of the alveoli or honeycomb cysts and subsequent tracking of the air along the bronchovascular sheath and accumulation in the mediastinum is thought to be the mechanism. Although a CXR will pick up significant subcutaneous emphysema and/or pneumomediastinum, a CT examination is more sensitive. SPM is usually benign and responds well to conservative treatment.

References

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¹. Department of Respiratory Medicine, Castle Hill Hospital, Cottingham, United Kingdom.
