Pneumothorax

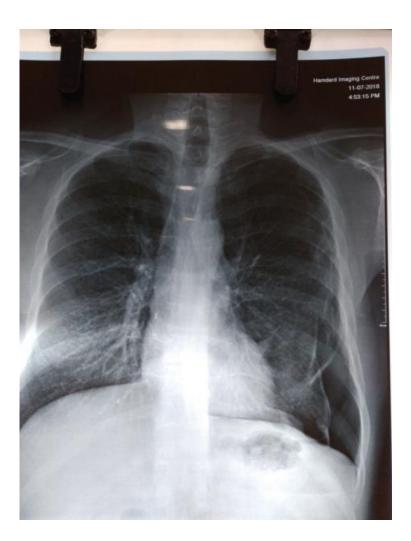
Shamim Ullah Khan Department of Respiratory Medicine HIMSR & HAH Centenary Hospital Jamia Hamdard

Definition

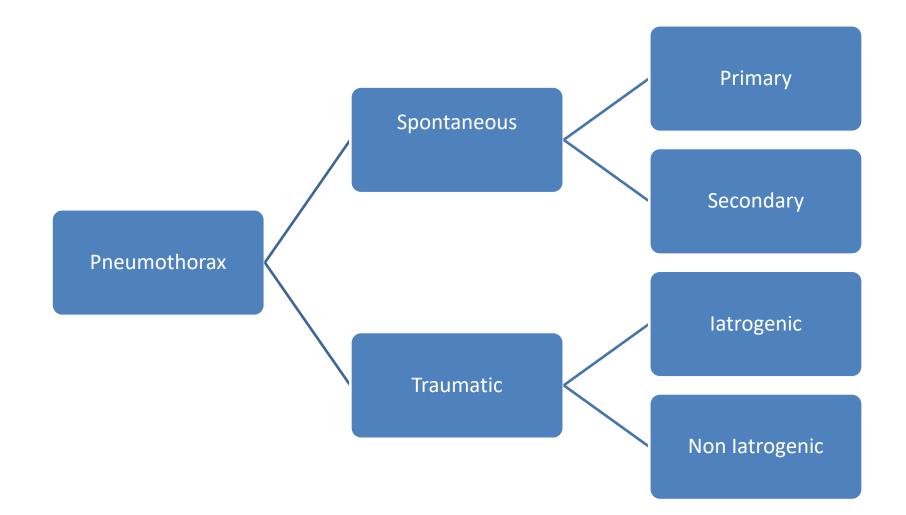
• "The accumulation of air in the pleural space with secondary collapse of the surrounding lung,"







Classification of Pneumothorax



Etiology of Primary Spontaneous Pneumothorax

- PSP by definition occurs in people without underlying lung disease,
- Associated with the rupture of subpleural blebs or bullae on the apical portion of upper lobes.

Genetics association PSP

- Brit-Hogg-Dube syndrome (BHD)
- Lymphangioleiomyomatosis
- Alpha-1 antitrypsin deficiency
- Cystic fibrosis
- Marfan syndrome
- Ehlers-Danlos syndrome
- Homocystinuria

Clinical Presentation

- Acute chest pain
- Dyspnea

Etiology of Secondary Spontaneous Pneumothorax (SSP)

Obstructive lung disease	Interstitial lung disease	Infection	Malignancy	Connective tissue disease
Chronic obstructive lung disease	Idiopathic pulmonary fibrosis	Tuberculosis	Primary lung carcinoma	Rheumatoid arthritis
Asthma	Non-specific interstitial pneumonitis	P. jerovici pneumonia	Pulmonary metastasis	Scleroderma
	Eosinophillic granuloma	Acute bacterial pneumonia (i.e.: staphylococcus		
	Lymphangiole iomyomatosis	Coccidioidomycosis		
	Histocytosis X			

COPD with Recurrent Pneumothorax



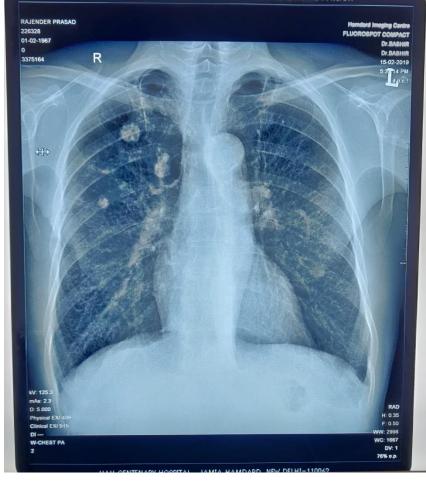


10/02/19 After ICDT Insertion

10/02/19



HAMDARD IMAGING CENTRE (A UNIT OF CLEARMEDI HEALTHCARE PVT.LTD).



13/02/19

15/02/19 After ICDT Removal

Patient came to OPD today with recurrent pneumothorax



29/04/19

Treatment options for PSP

Treatment options for PSPbservation

Oxygen treatment

Simple manual aspiration

Small catheter drainage

Chest tube drainage

Medical thoracoscopic talc poudrage or pleural abrasion

Video-assisted thoracoscopic surgery (VATS) with blebectomy or bullectomy

VATS with pleural abrasion or partial pleurectomy

Treatment options for SSP

- Oxygen treatment
- Chest tube drainage
- Medical thoracoscopic talc poudrage or pleural abrasion (PLEURODESIS)
- Video-assisted thoracoscopic surgery (VATS) with blebectomy or bullectomy
- VATS with pleural abrasion or partial pleurectomy

Complication of Pneumothorax

- Recurrent Pneumothorax
- Tension Pneumothorax
- Bronchopleural Fistula
- Re-expansion pulmonary Oedma

References

- Levine, D.J., Sako, E.Y., Peters, J., (2008) Pneumothorax. In Fishman, A.P., Elias, J.A. (eds). *Fishman's Pulmonary Diseases* and disorders. vol. 2, 4th edn. New York: McGraw Hill Publication. p. 1500-1533
- Devaraj, U., D'Souza, G., (2011) Pneumothorax. In Jindal, S.K., *Textbook of Pulmonary and Critical Care Medicine*. vol. 2, 1st edn. NewDelhi: Jaypee Brothers Medical Publishers (P) Ltd. p. 2041-2054