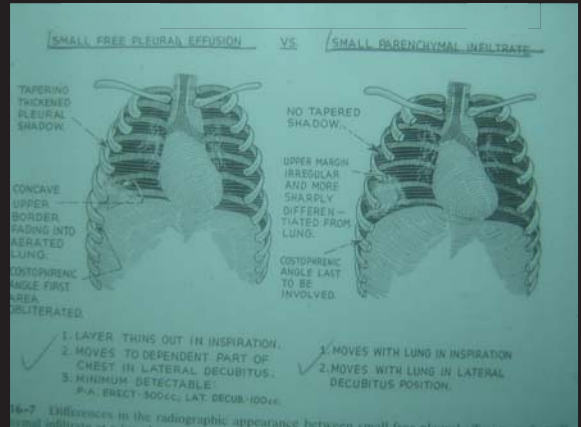


# Basic Interpretations of CXR (2)

## 胸部X光片基本判讀須知

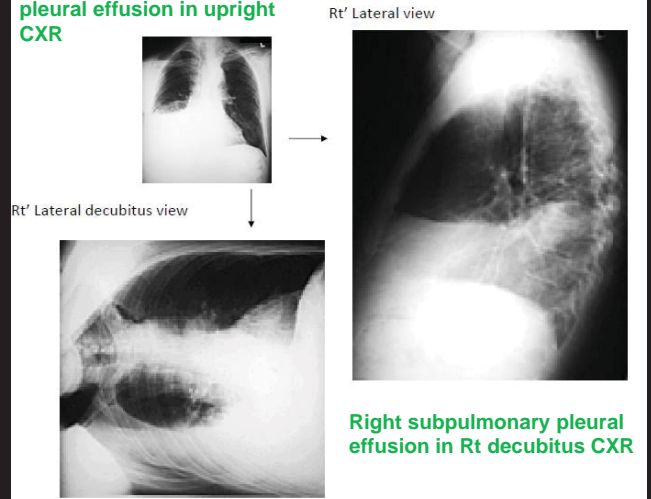
國泰綜合醫院放射線科  
張永強醫師  
2017/11/18

# Pleural effusions



Squamous cell lung CA in RLL and right pleural effusion

## Right subpulmonary pleural effusion in upright CXR



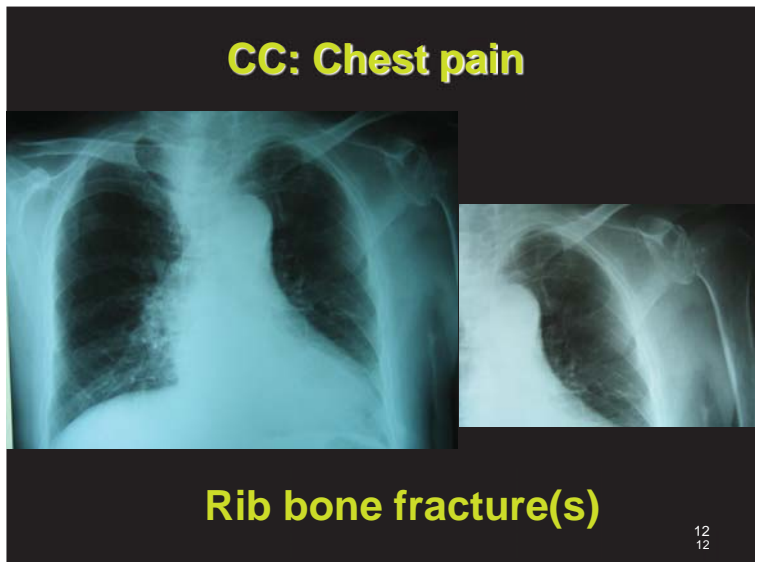
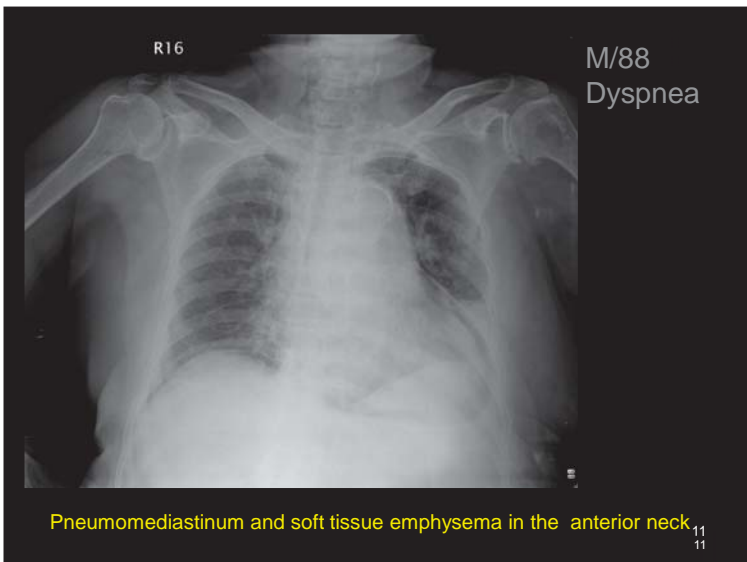
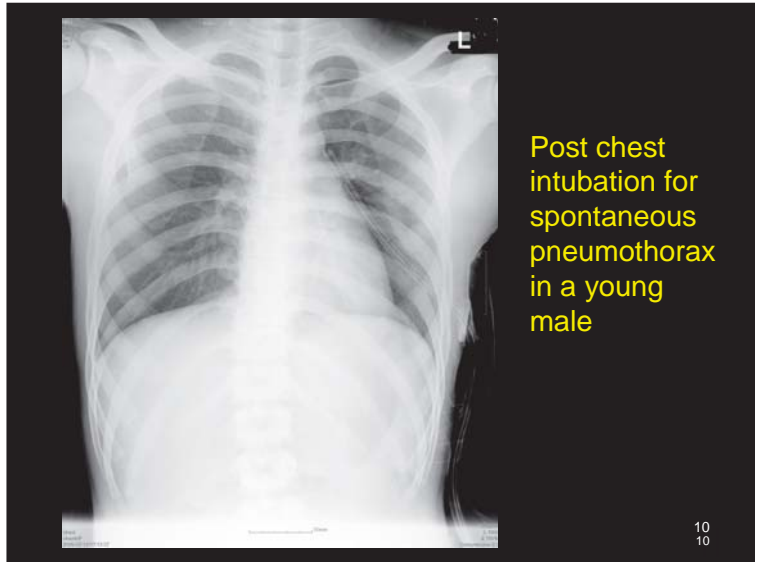
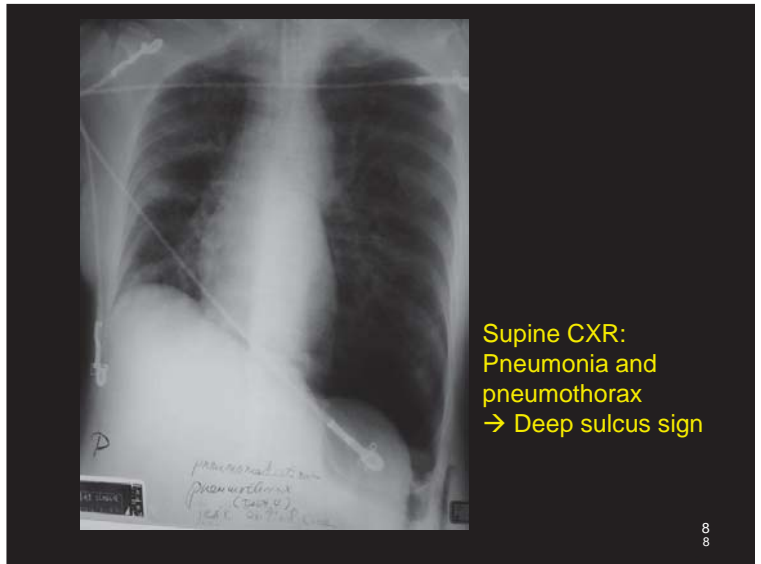
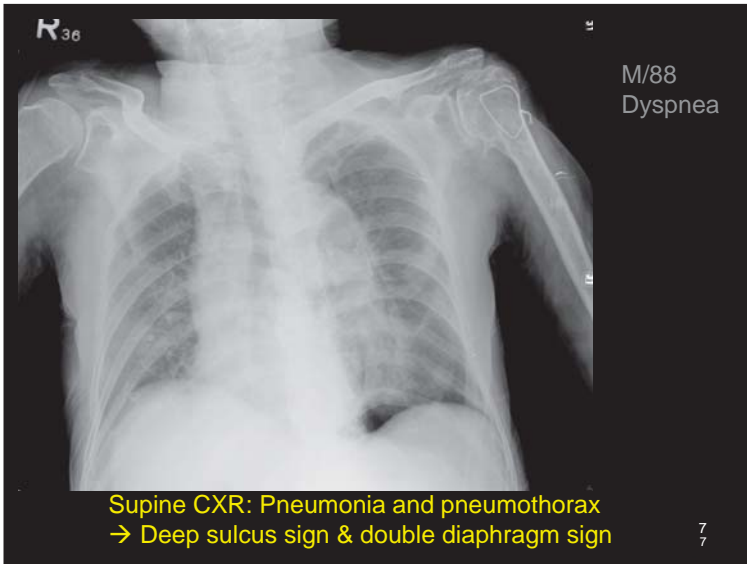
# Pneumothorax

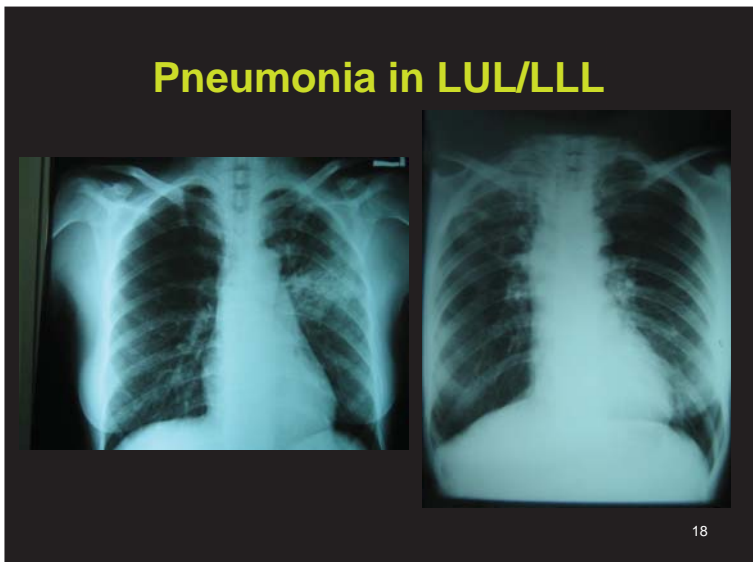
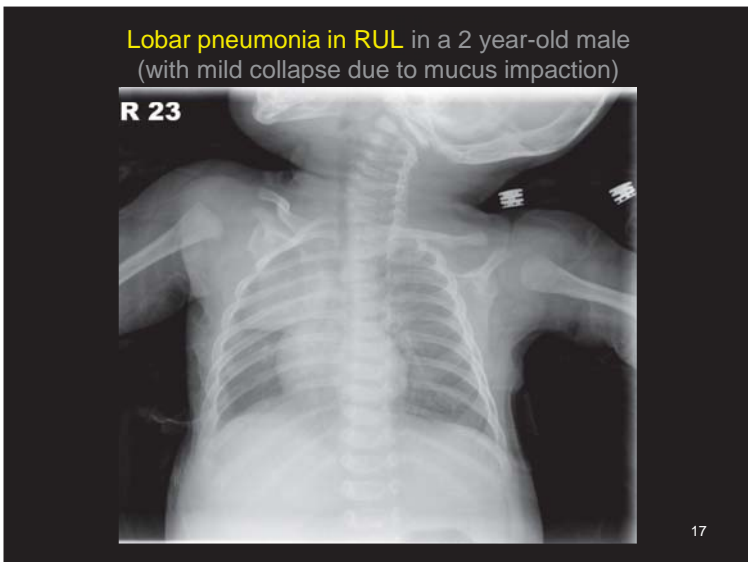
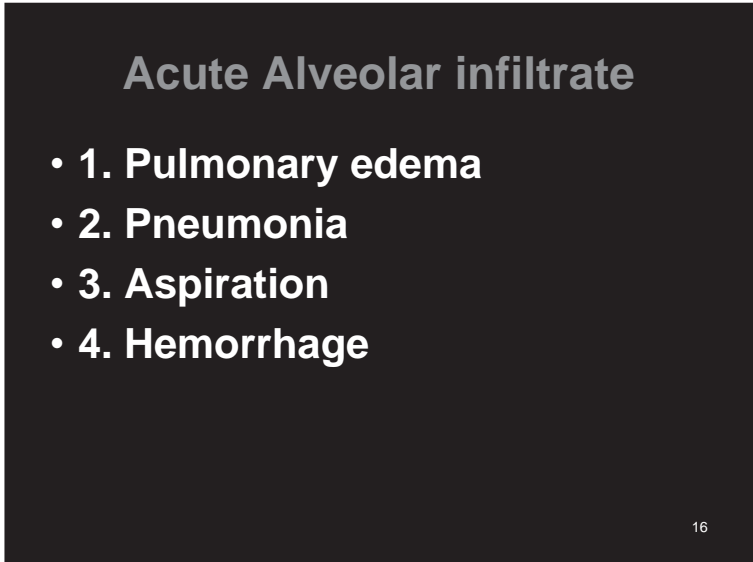
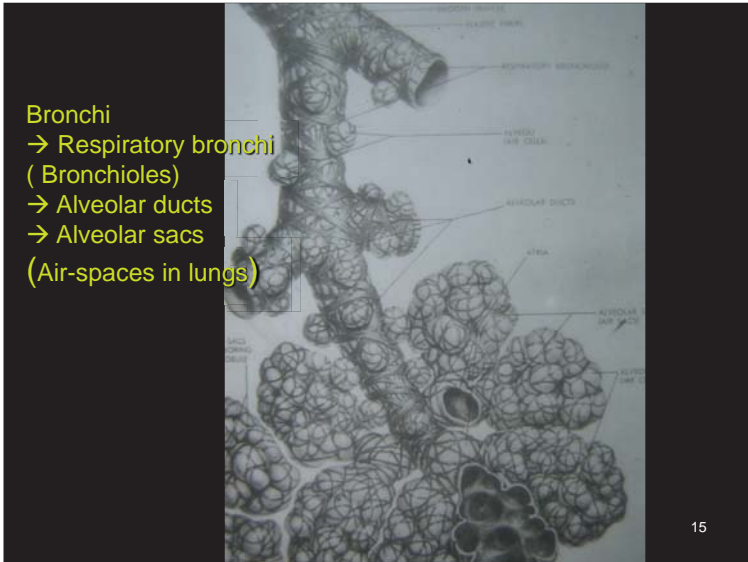
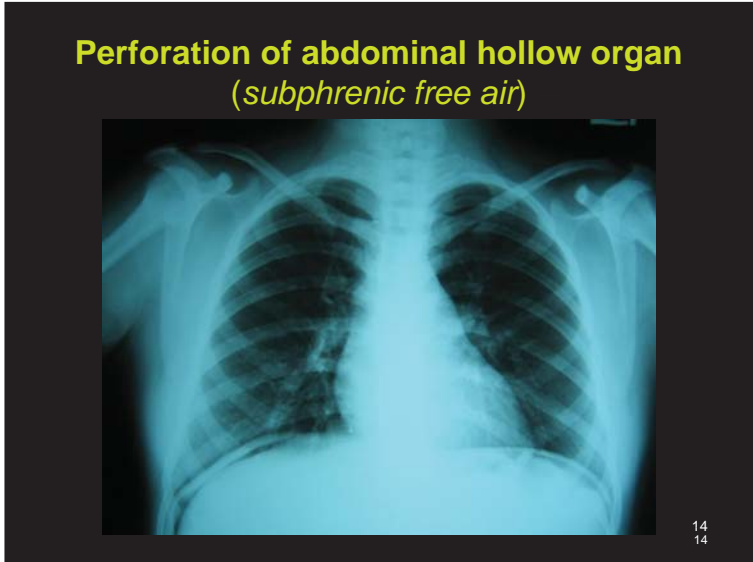
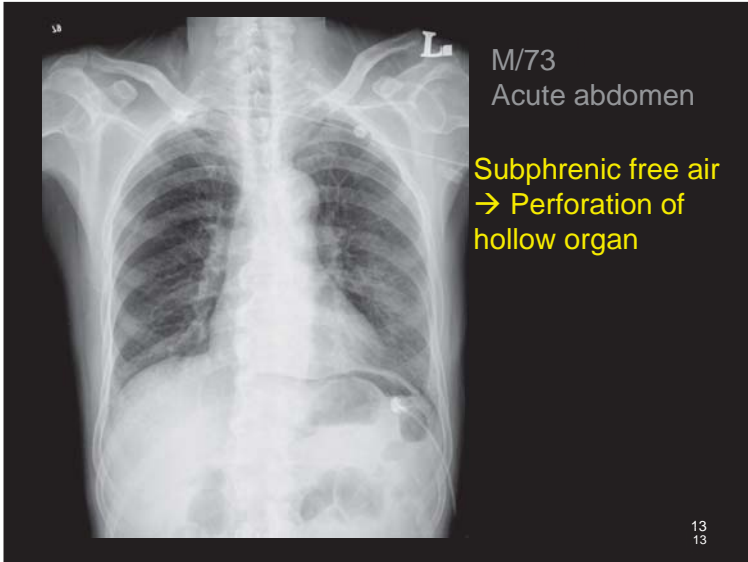
- Spontaneous pneumothorax
- Post-traumatic pneumothorax
- Tension pneumothorax
- Hemopneumothorax



M/21, Sudden onset of chest pain

Spontaneous pneumothorax



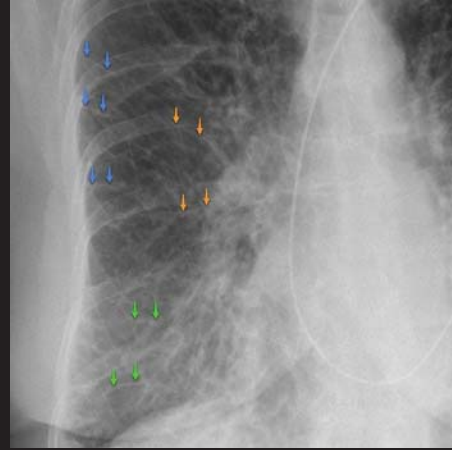


Acute pulmonary edema in a 53 year-old male

Congestive heart failure and pulmonary edema  
 → Confluence of alveolar infiltrates in inner one-third of bilateral lung fields  
 Bat-wings appearance

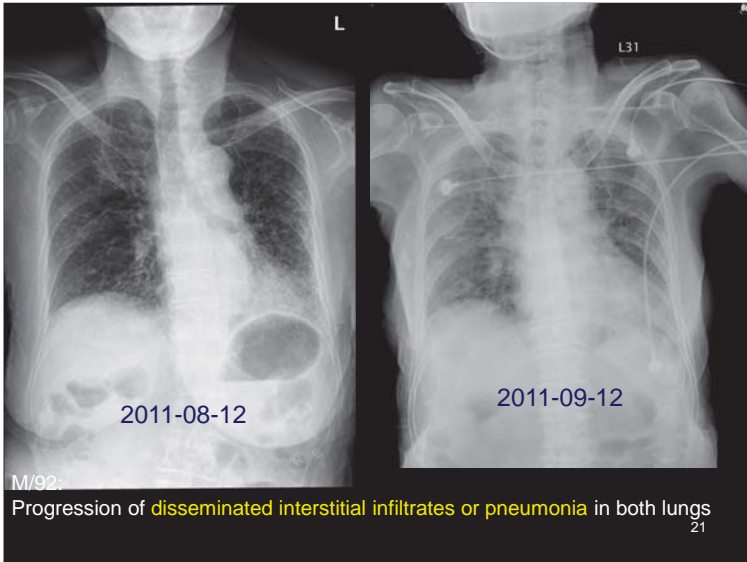


## Pathology: Interstitial pattern



**Kerley lines**  
 (septal lines) :

- A
- B
- C



M/92:  
 Progression of disseminated interstitial infiltrates or pneumonia in both lungs

## Pathology: Nodular pattern (mass, consolidations)

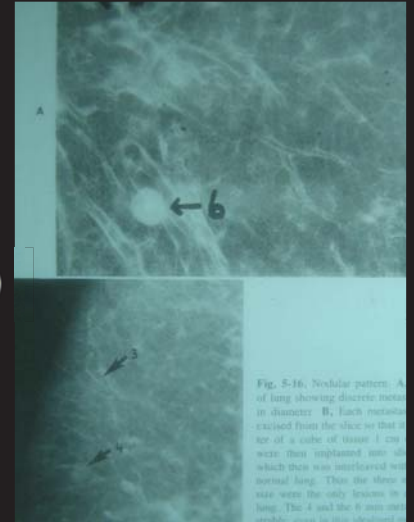


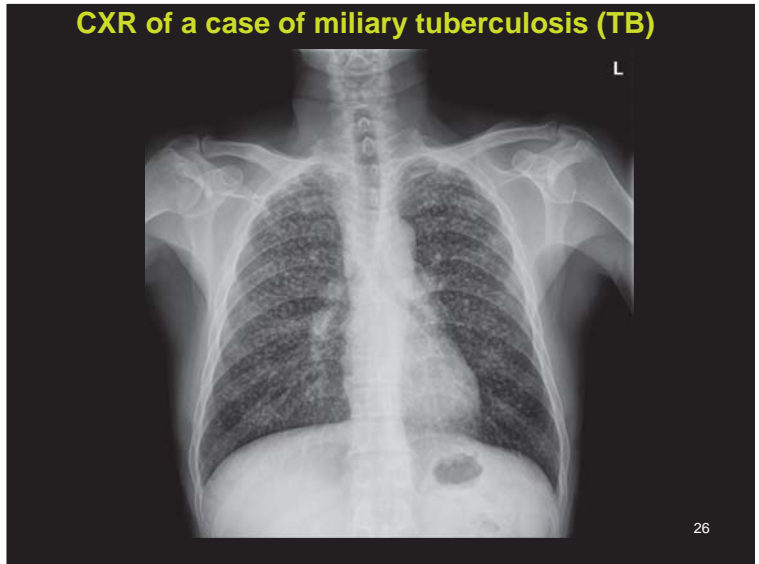
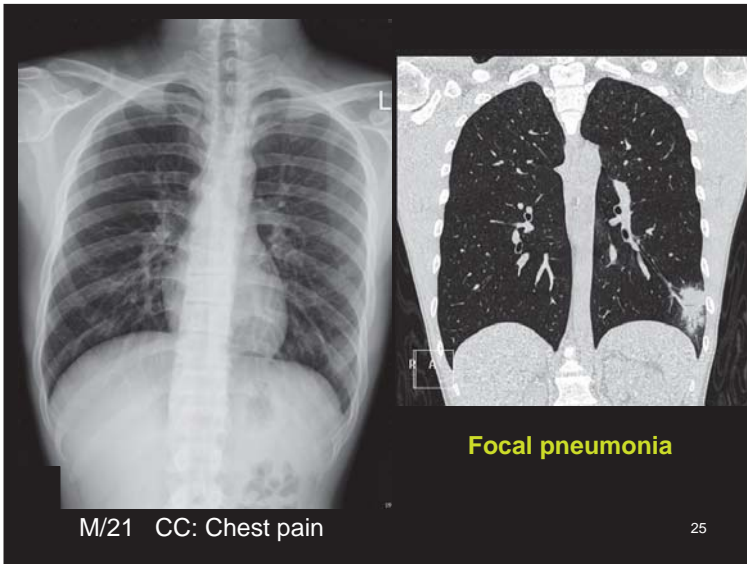
Fig. 5-16. Nodular pattern: A slice of lung showing discrete nodules in diameter 1 mm. Each nodule excised from the slice so that it was of a cube of tissue 1 cm on each side, then implanted into air which then was incubated in normal lung. Thus the slice 1 mm size were the only lesions in lung. The 4 and the 6 mm nodules were the only lesions in lung.

## A lung nodule in a case of RUL lung cancer (adenocarcinoma)



## A lung nodule in a case of RLL lung cancer (adenocarcinoma)

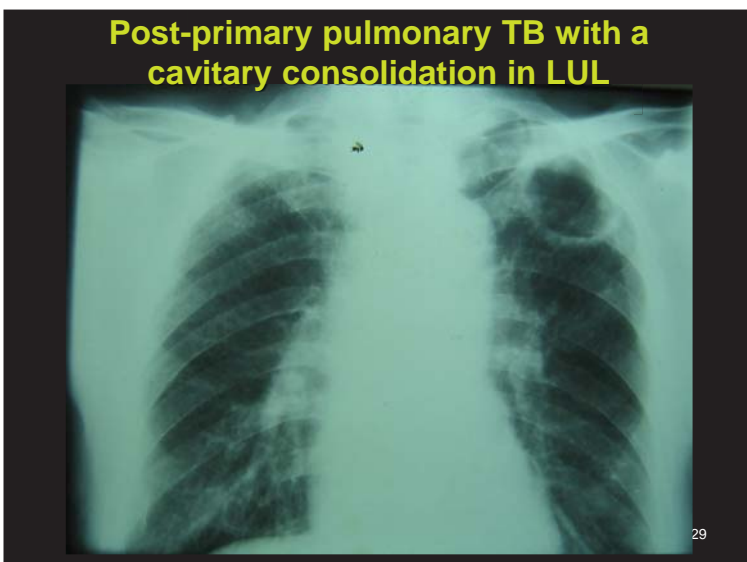




**Pulmonary cavitory lesion**

- The development of an air space within solid tissue whether a mass or consolidated /infarcted lung
- Tends to have a thicker wall than found in cysts or bullae
- 95% of cavitory nodules with a wall thickness greater than 16 mm are malignant and 92% with a wall thickness less than 4 mm are benign

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**Tubes, Lines & Drains**

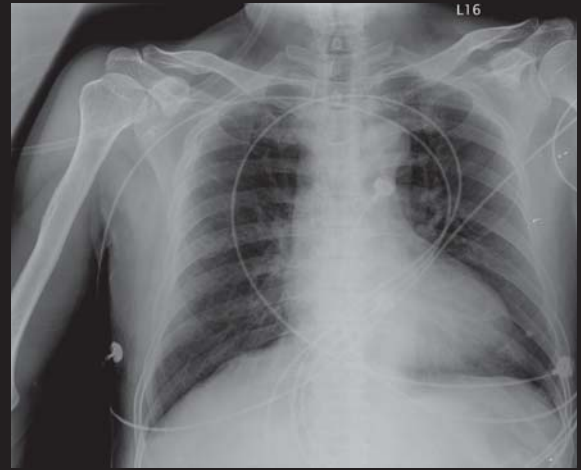
- Using chest radiography to assess the support device

30

Apparatus seen on postcardiac surgery chest radiographs

Location	Apparatus
Airway	Endotracheal tube Tracheostomy tube
Venous	Central venous pressure catheter Pulmonary artery catheter
Arterial	Intra-aortic balloon pump Extracorporeal life support cannulas
Cardiac	Temporary epicardial pacing leads Left atrial catheter Assist devices
Pleural	Chest tubes
Mediastinum	Drains
Esophagus	Drainage tubes Feeding tubes

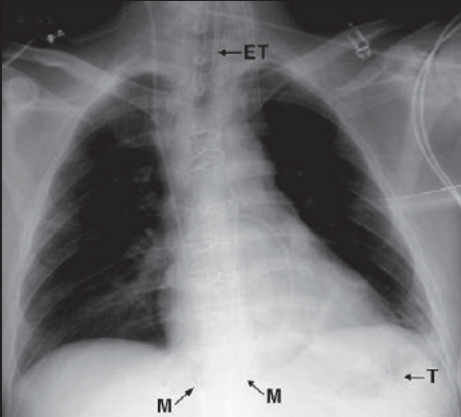
31



M/70

Too many wires and devices on chest.

32



Typical apparatus seen on post- cardiac surgery radiographs. Note the normal position of the **endotracheal tube (ET)**, **Swan-Ganz catheter (SG)**, **mediastinal drains (M)**, and **esophageal tube** entering the stomach (T).

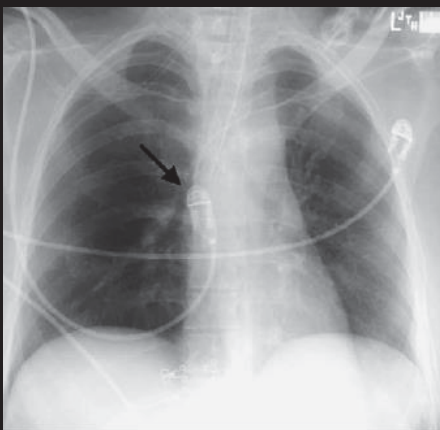
33

**S/P Endotracheal Intubation**



The normal position of an endotracheal tube → the tip 2 to 6 cm above the carina

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**Endotracheal tube** (arrow) with tip in the right main bronchus. Note secondary hyperinflation of the right lung with mediastinal shift to the left.

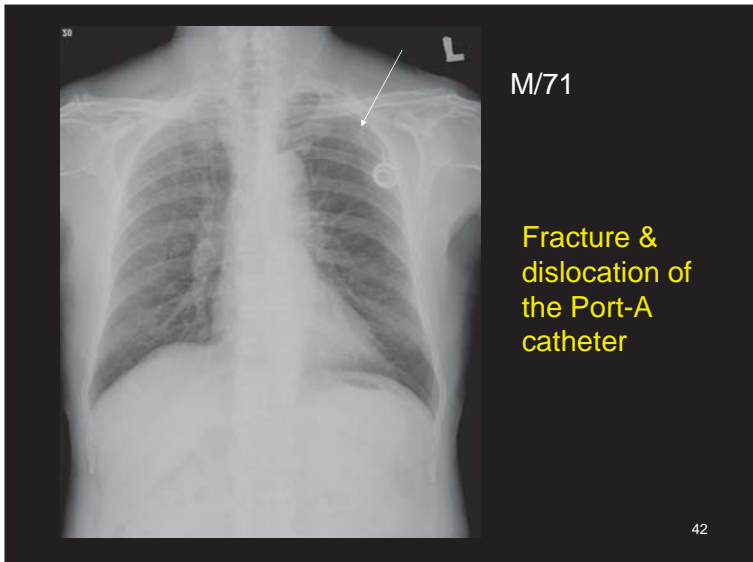
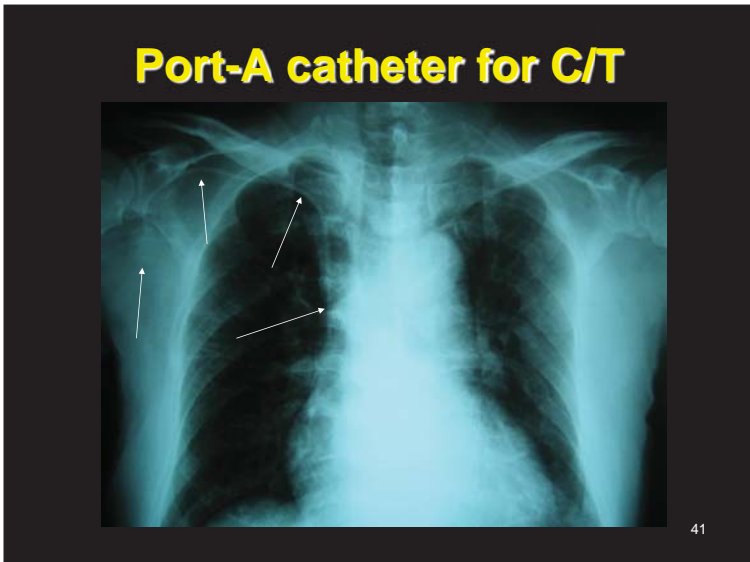
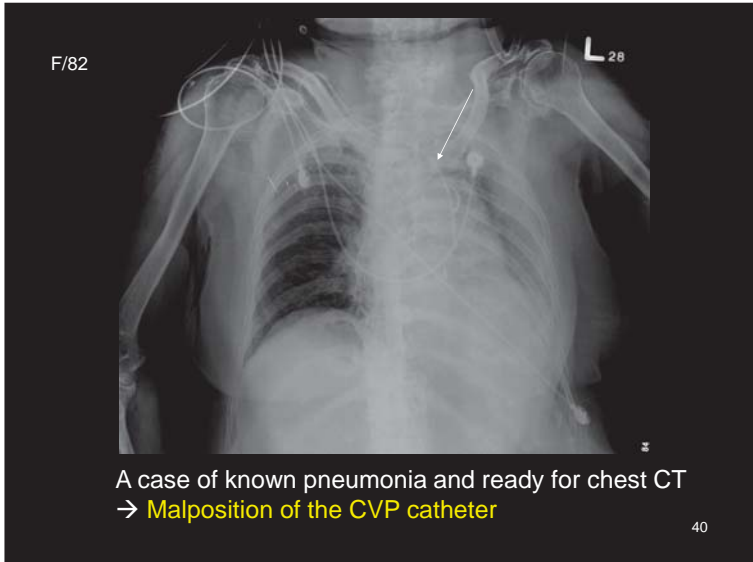
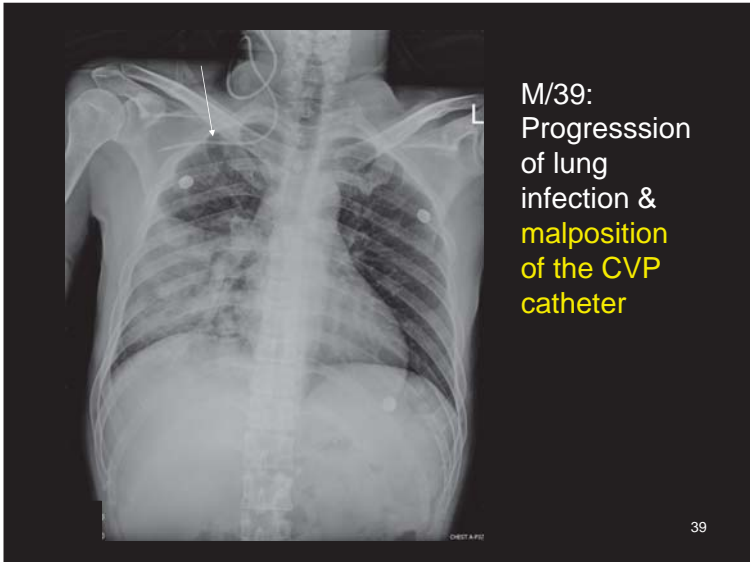
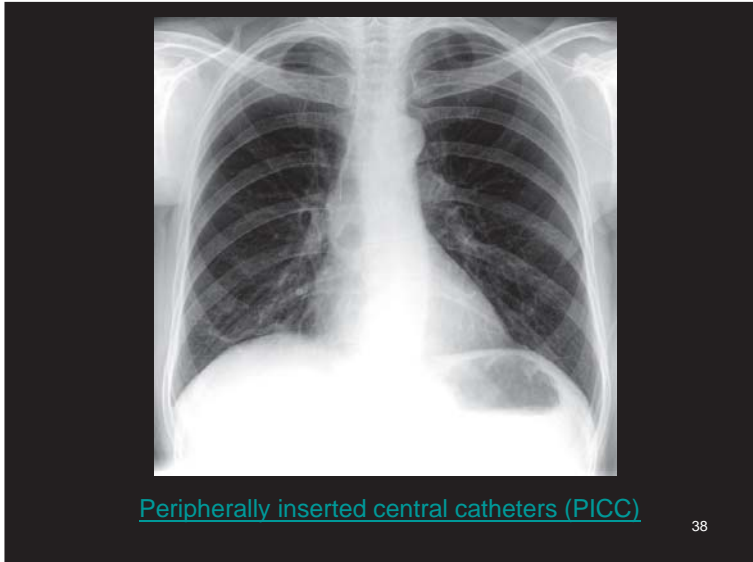
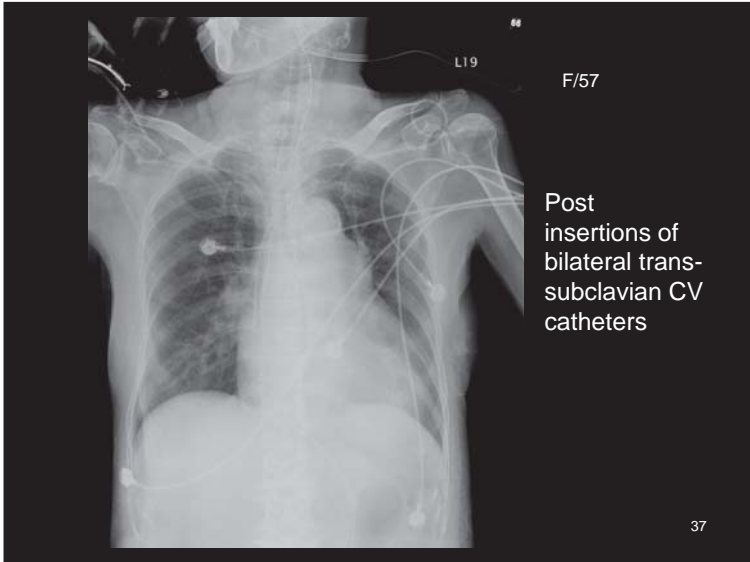
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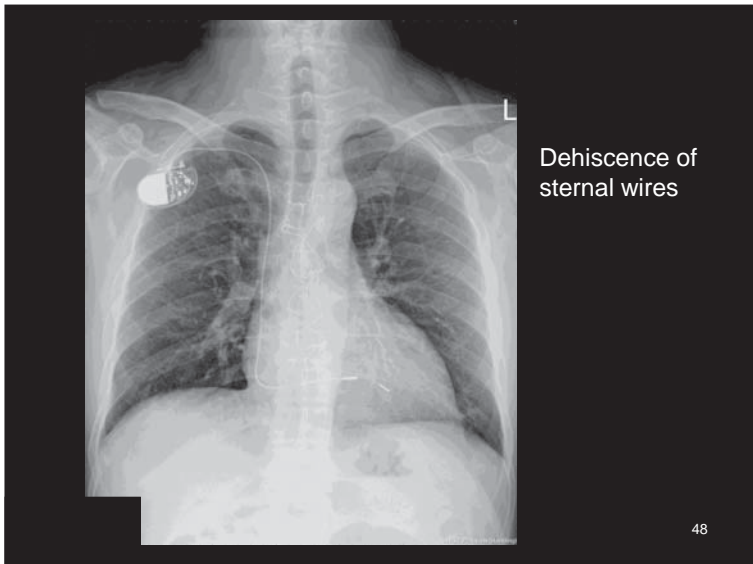
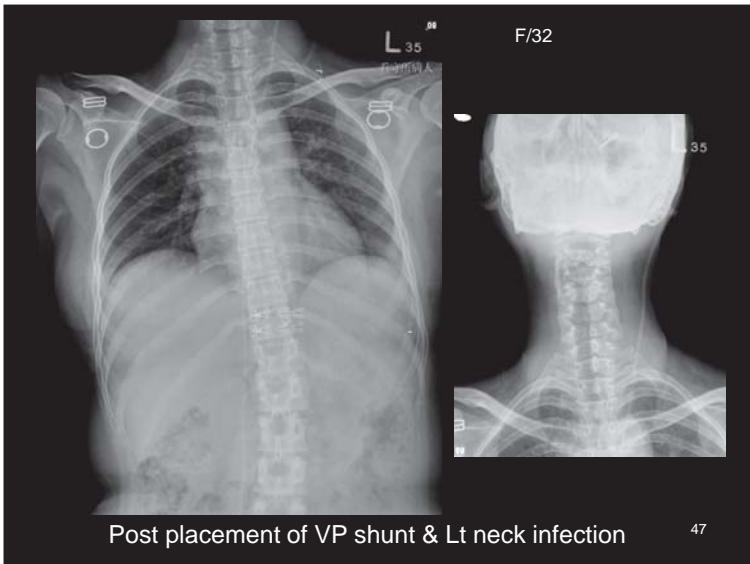
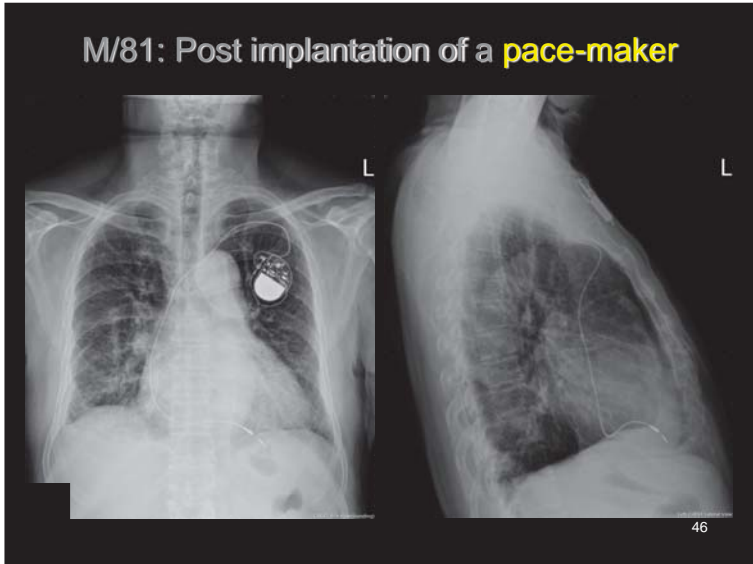
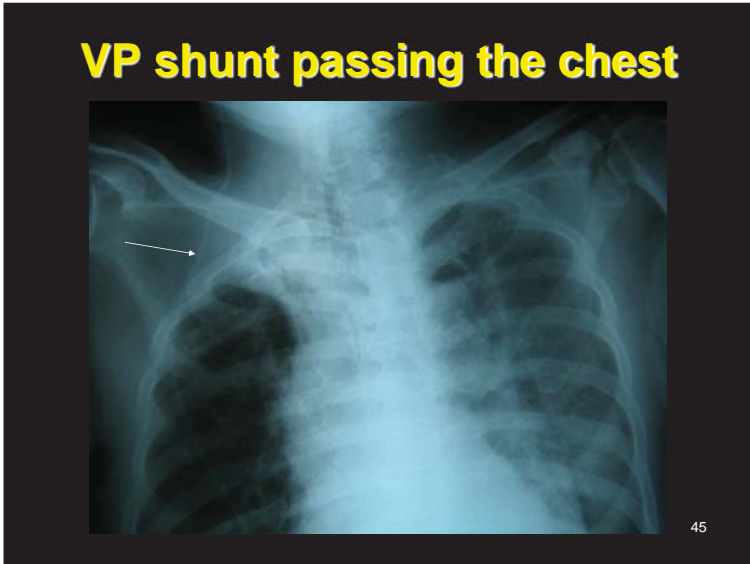
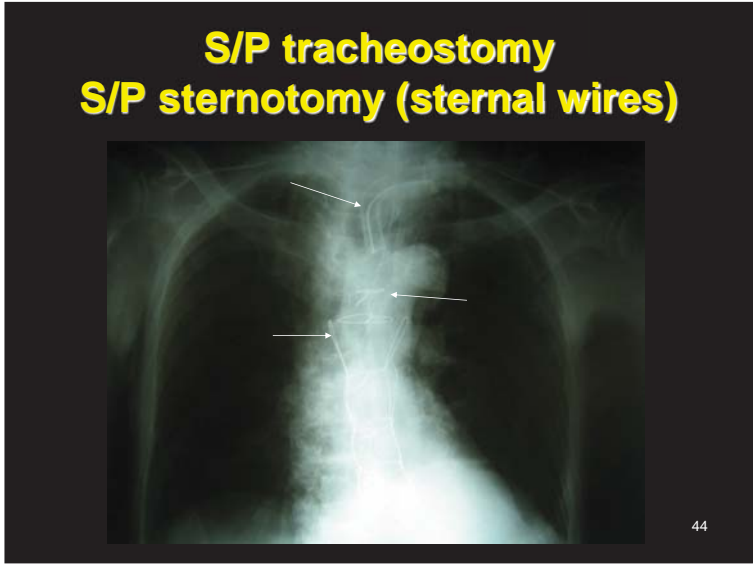
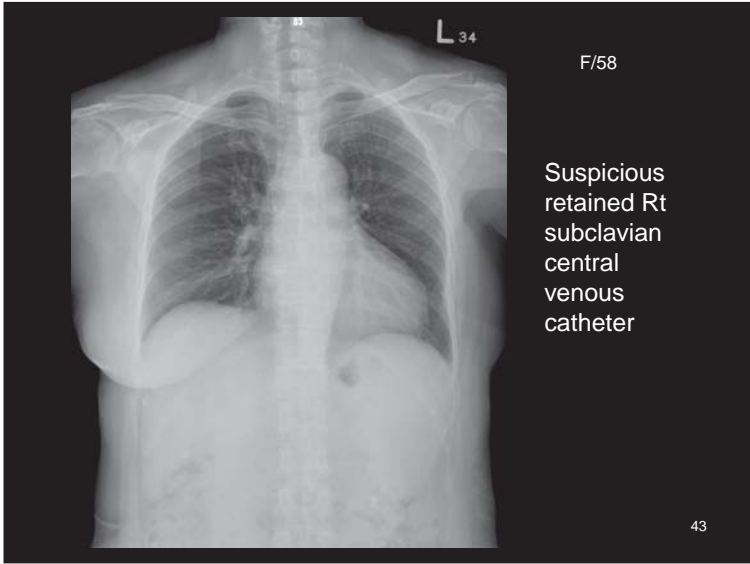


F/77  
CXR (2011-09-15)

A cardiac disease with a double-lumen CVP catheter & suspected post-primary pulmonary TB

36









M/43

Post  
replacement  
with mechanical  
aortic valve

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Thank you for your attentions!



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