

Medical Thoracoscopy in the Intensive Care Unit

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Introduction



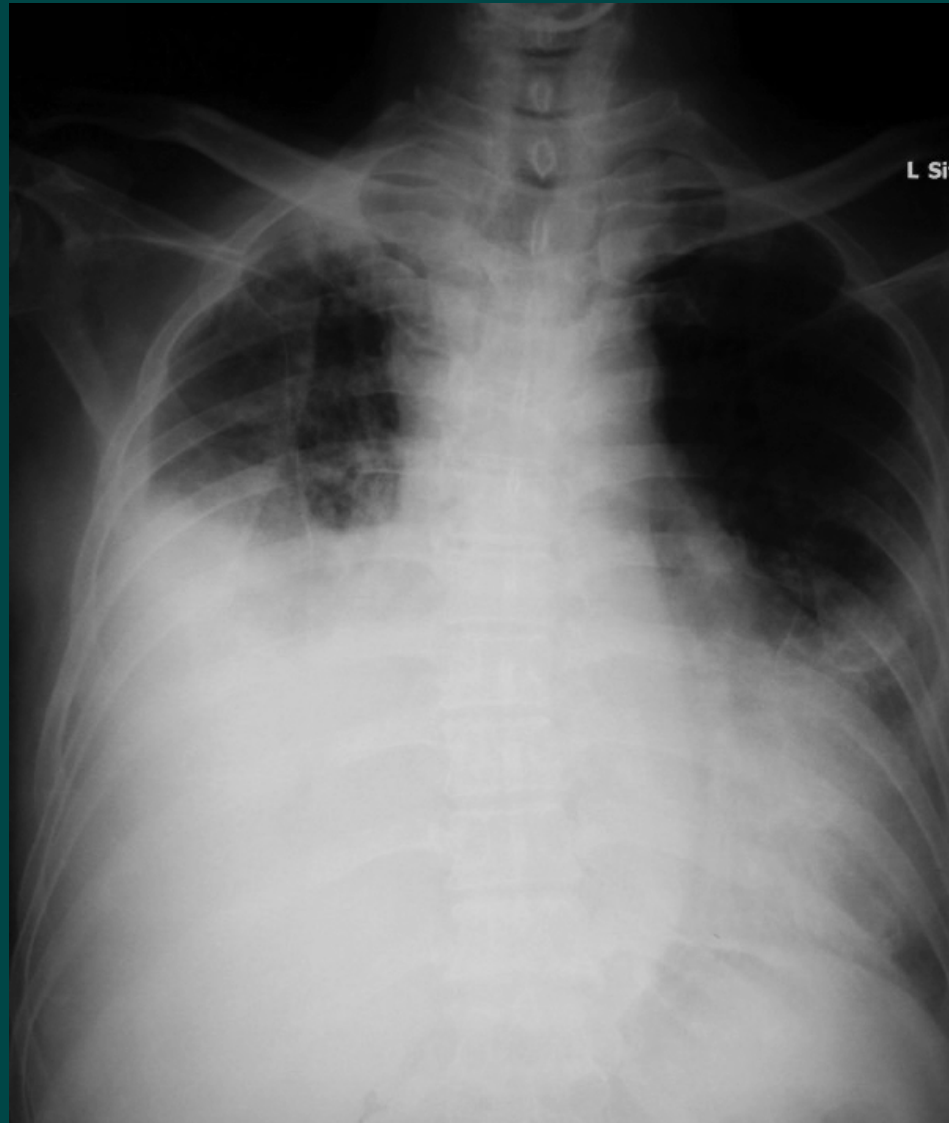
- ◆ Thoracoscopy
 - ◆ Used to be performed by only **surgeons in OT**
 - ◆ Medical thoracoscopy (MT) is now being performed by **physicians in endoscopy suites**
- ◆ Case report of its use by **critical care physicians at bedside in ICU**

Case summary (1)



- ◊ 79/M
- ◊ HT & DM
- ◊ Productive cough & Rt pleuritic pain

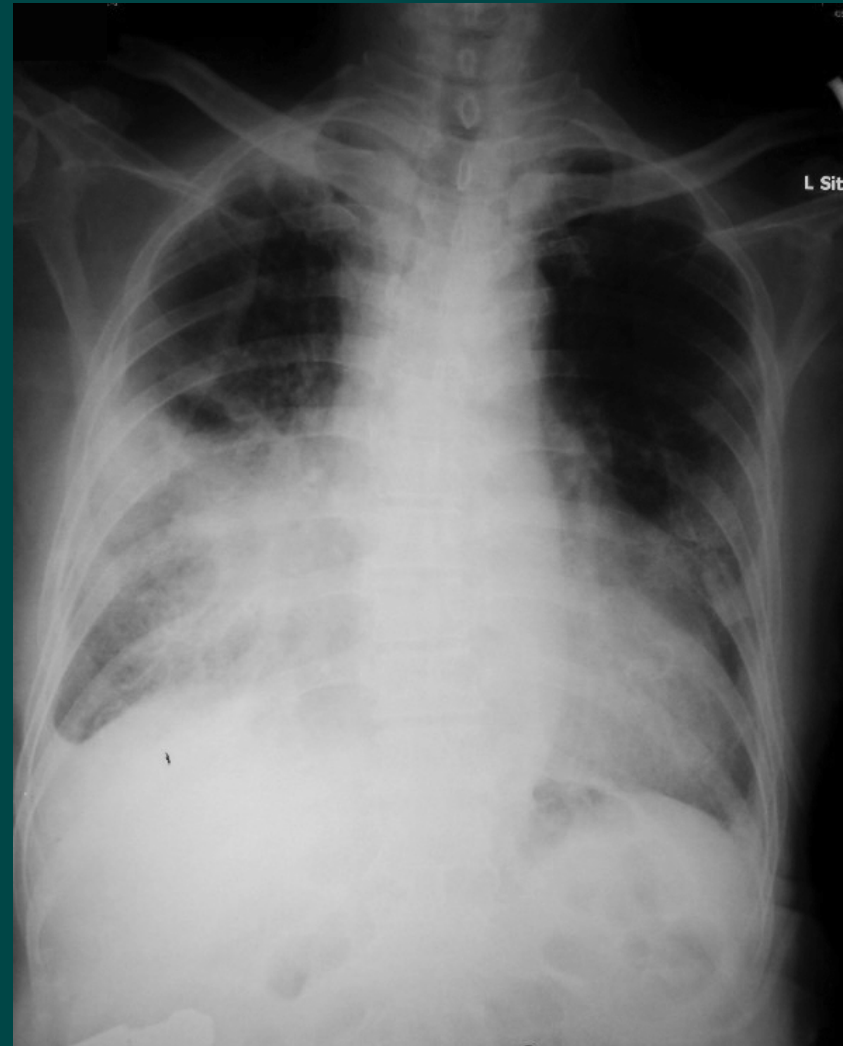
CXR on Admission



Case summary (2)



- ◆ Rt thoracocentesis:
 - ◆ Exudative
 - ◆ WCC 6615/mm³
 - ◆ 85% lymphocytes
 - ◆ Cytology –ve
 - ◆ AFB smear –ve
 - ◆ Adenosine deaminase 33U/L (normal <30)

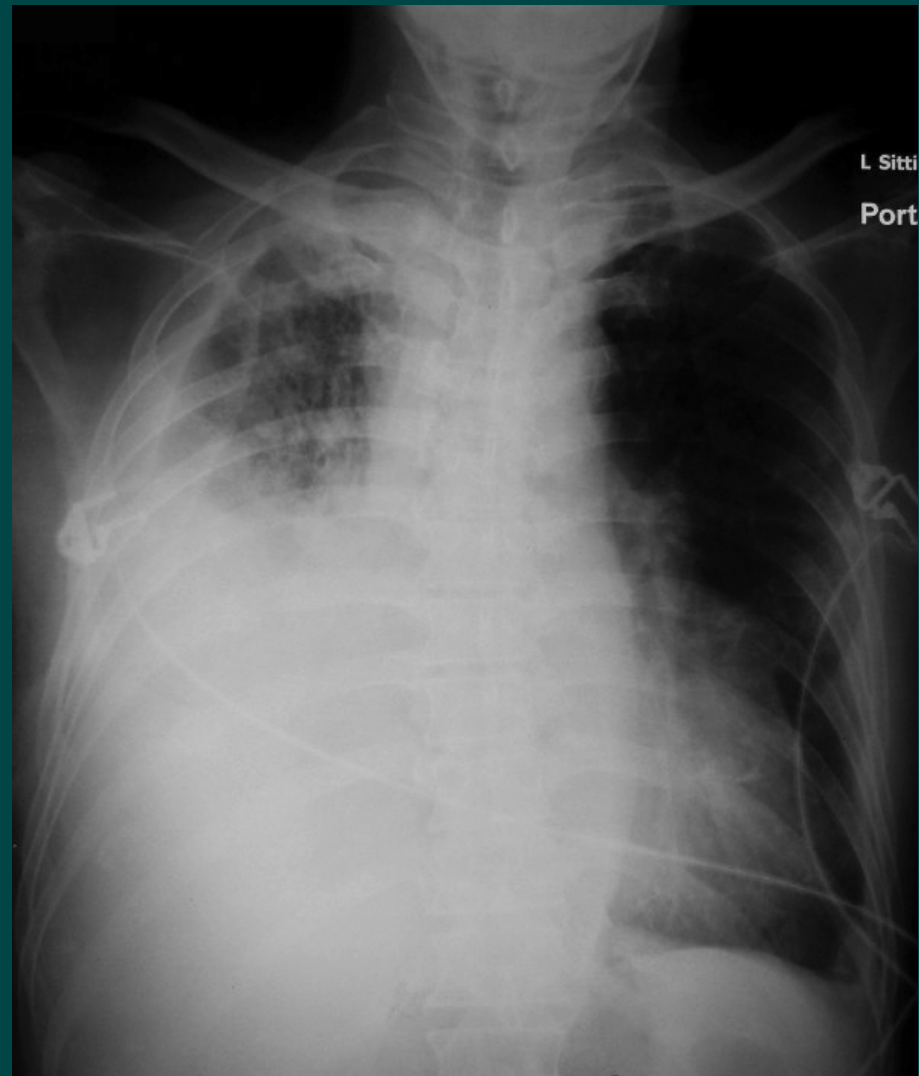


Case summary (3)



- ◆ Empirical antibiotic
- ◆ Rapid re-accumulation of Rt pleural effusion
- ◆ Developed respiratory failure on D3
- ◆ Intubated & transferred to ICU

**Undiagnosed
exudative effusion
→ Proceeded to MT**



MT in ICU (1)

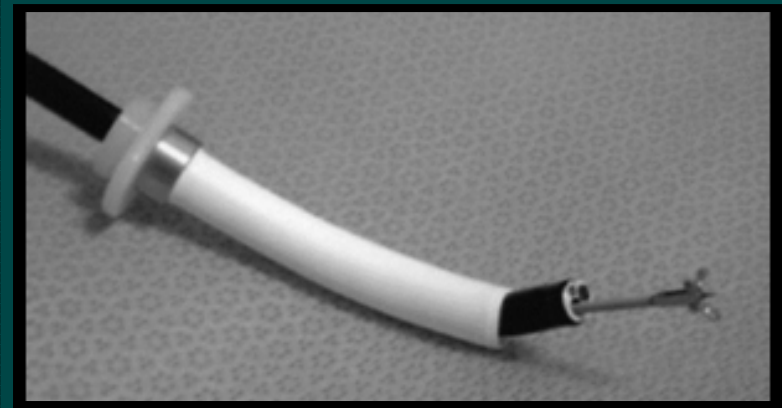


- ◆ Changed to a 37 French left-sided double-lumen ETT
 - ◆ Selective left lung ventilation
- ◆ Turned to a left decubitus position
- ◆ Site of entry marked by bedside USG

MT in ICU (2)



Semi-rigid pleuroscope
(Model LTF 160, Olympus®)



10-mm disposable trocar
(Model MAJ-1058, Olympus®)

Pleural biopsy forceps
(Model FB-55CR, Olympus®)



MT in ICU (3)



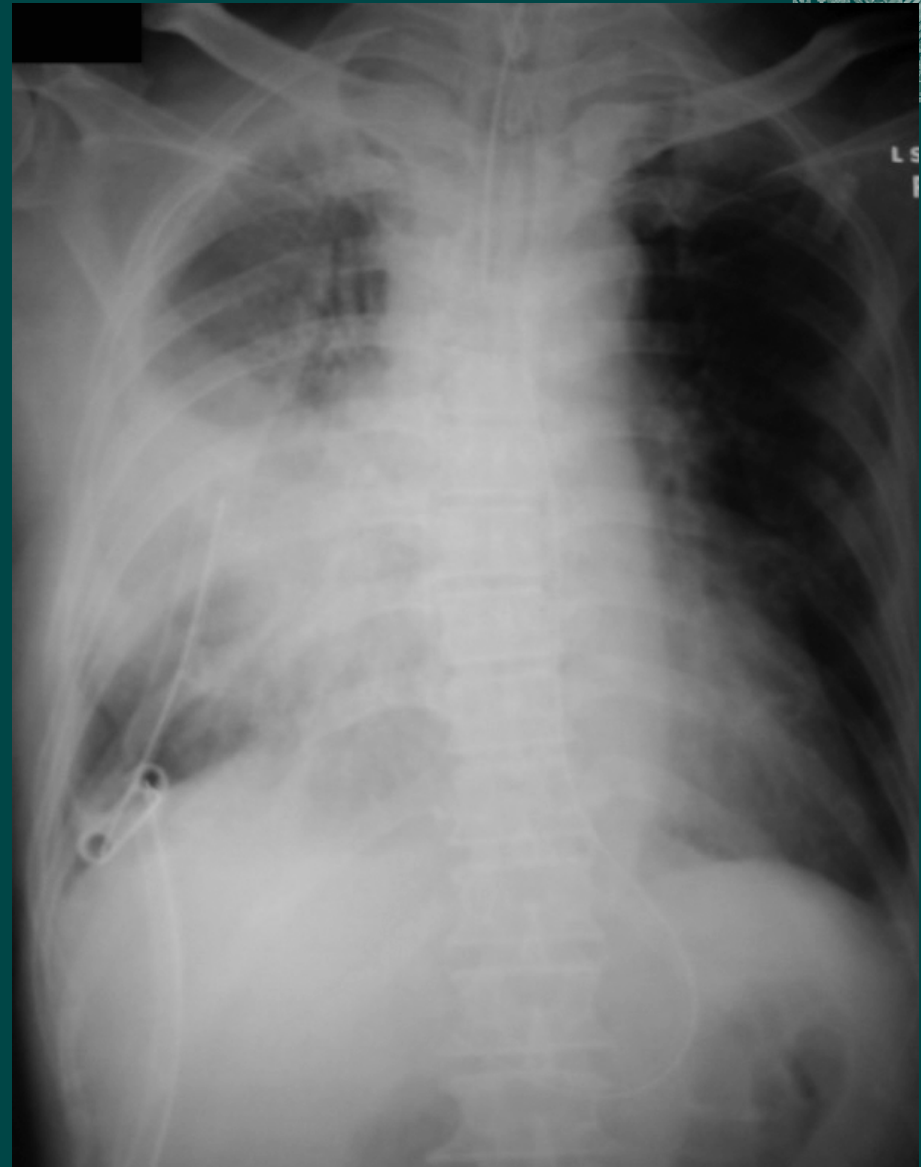
Flesh-coloured nodules on parietal pleura



MT video (trimmed)7.avi

MT in ICU (4)

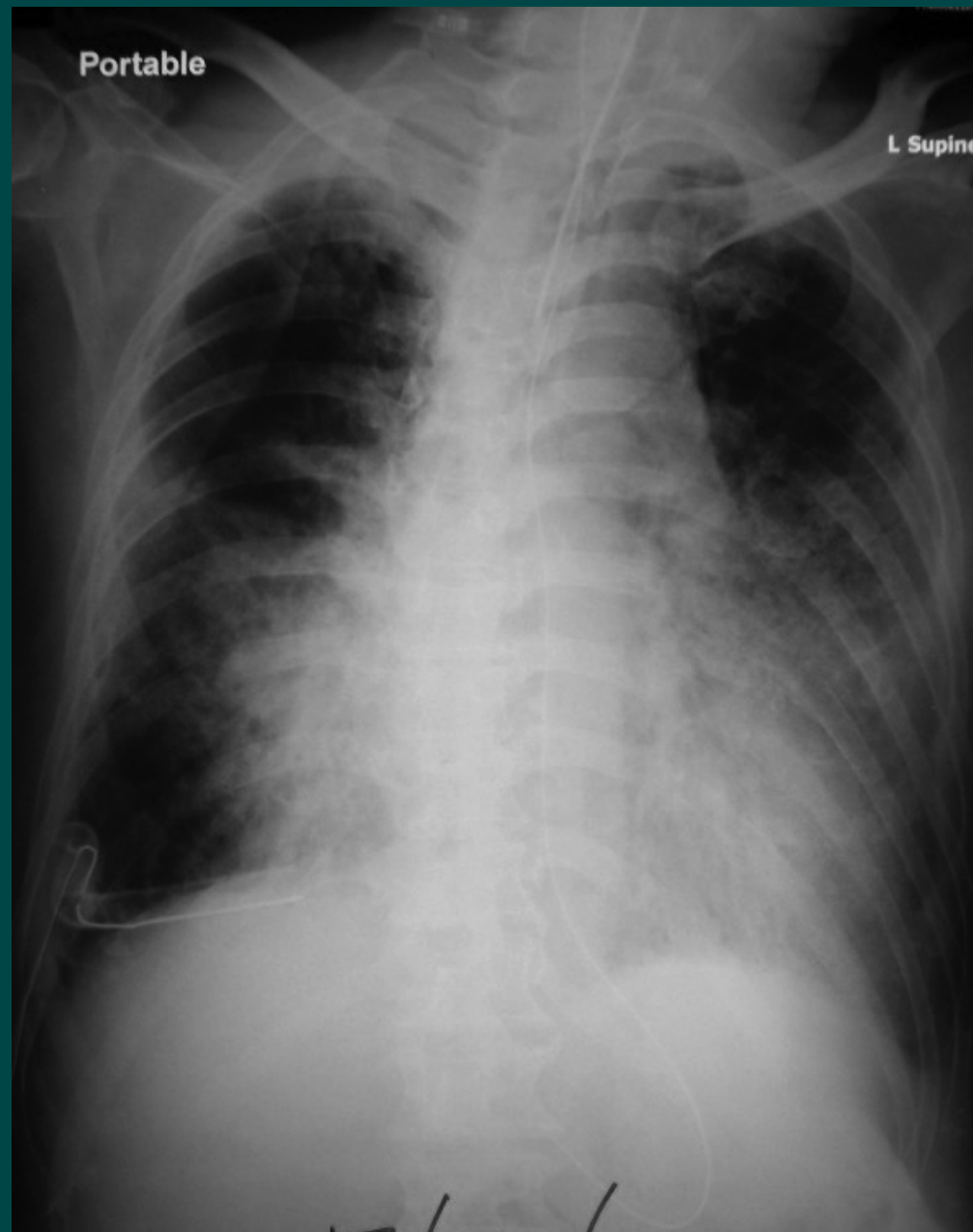
- ◆ Chest drain (27 French) inserted
- ◆ Rt lung re-expanded immediately
- ◆ No air leak



MT in ICU (5)



- ◊ Changed back to a single-lumen ETT
- ◊ No complications arose
- ◊ **Pleural biopsy**
 - ◊ **Diffuse large B-cell lymphoma**
- ◊ Conservative management



Conclusions



- ◆ First reported case in HK of MT performed in ICU
- ◆ Demonstrated its **safety & feasibility as a bedside procedure**
- ◆ Allowed a **rapid and definitive diagnosis**
- ◆ **Reduced patient transport** and associated risks
- ◆ Potentially **reduced cost**

The End

THANK YOU



PYNEH ICU MT protocol



Pamela Youde Nethersole Eastern Hospital
Department of Intensive Care

Medical Thoracoscopy /Pleuroscopy in ICU

