

# 與大師對談

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- 依照臨床時序，請大師模擬一線放射科醫師；於未知診斷，或者有限度臨床線索之情形下，進行閱片及解讀。
- 鑑別診斷為主要，確定診斷為次要。
- 目的在於學習大師之影像判讀邏輯思考。
- 請大師給予本院影像品質建議：  
Protocols, techniques, etc.

**CASE 1**

**22 Y/O MAN**

# Brief history

- **Past history**

- smoker for 6-7 years

- **Chief complain**

- cough and dyspnea for 1 week

- no fever, no chest pain

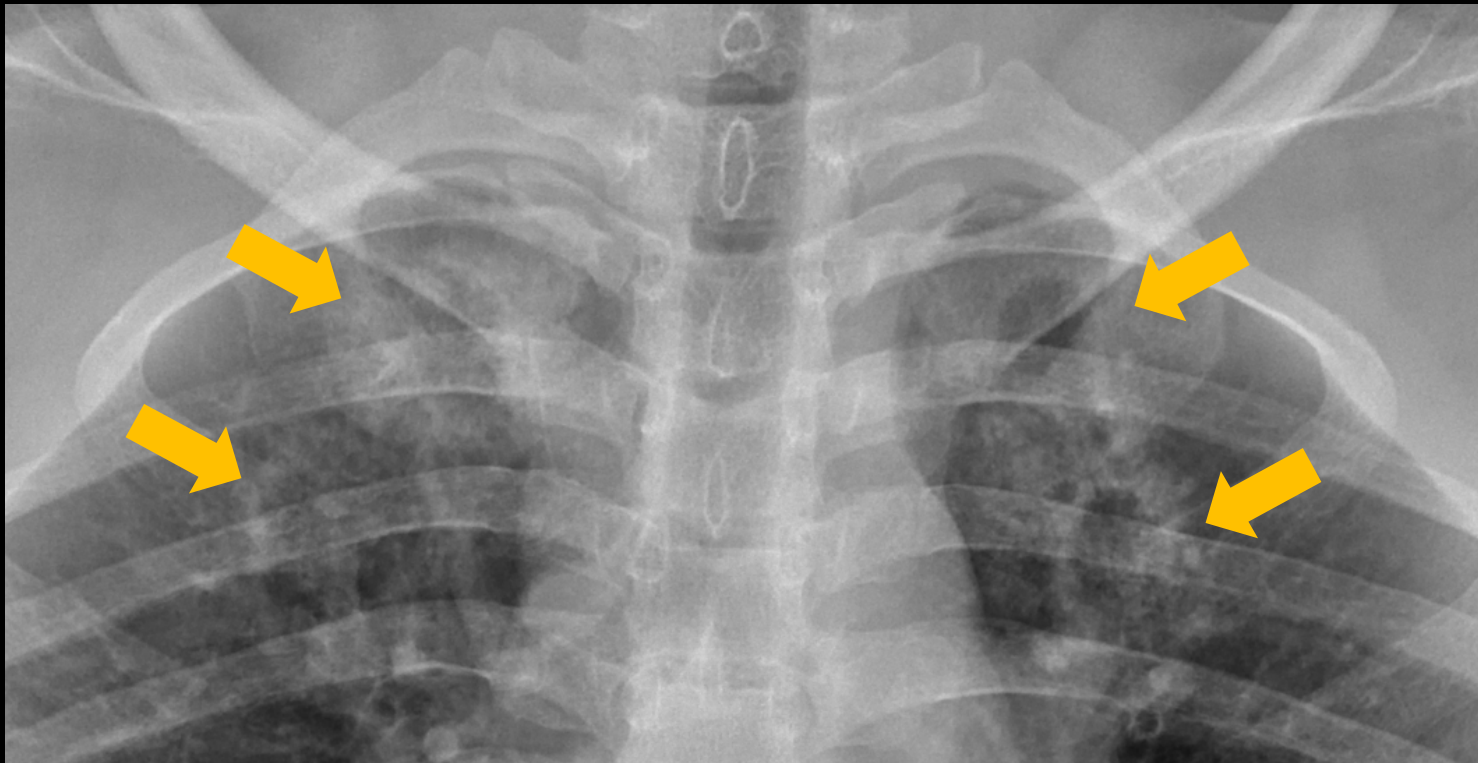
# Imaging studies

CXR

Chest CT +C

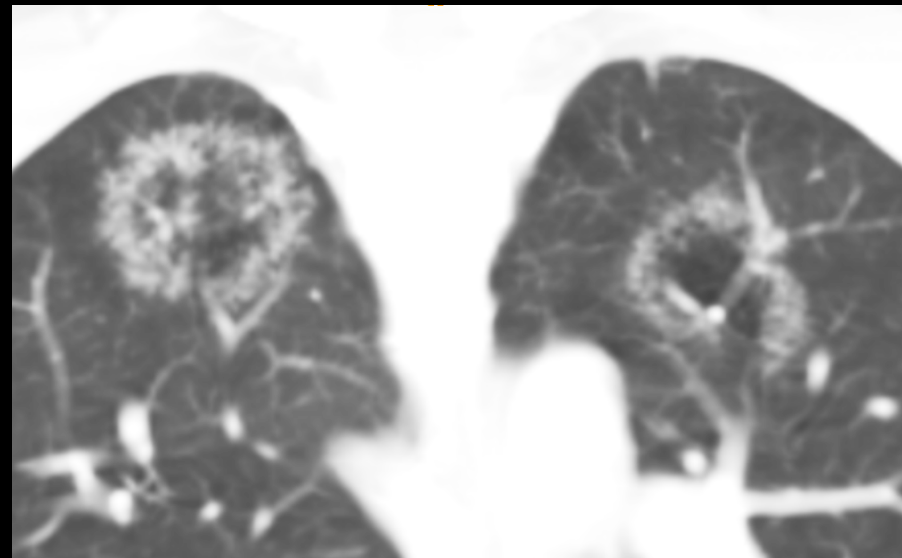
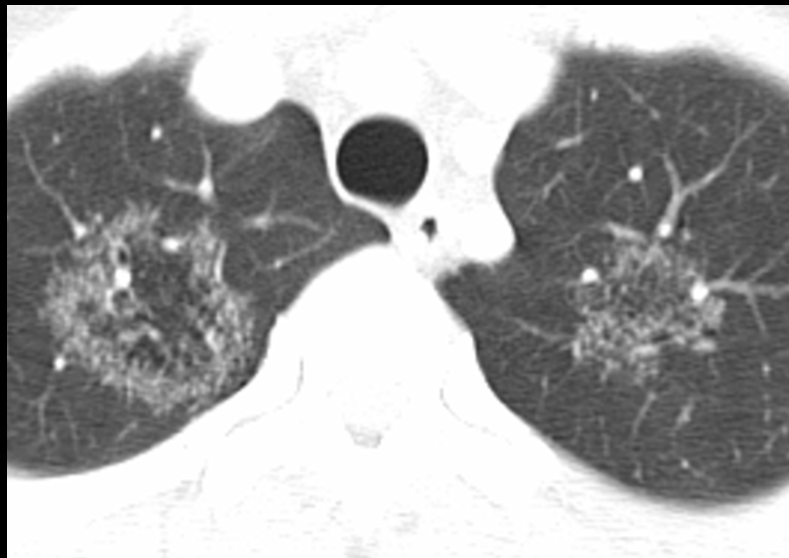
# CXR

- ✓ Increased hazziness over bilateral lung zones with faint consolidations and cavitary lesions at the right apical lung zone



# CECT of chest

- ✓ Bilateral upper lungs and RLL (superior segment) multifocal peripheral ground glass opacities and infiltrates with **reverse halo sign** appearance, suggestive of inflammatory/infectious process.



# Differential Diagnoses

- **Atypical infection (fungal)**
  - ✓ TB
  - ✓ Aspergillosis
- **Organizing pneumonia (esp. Cryptogenic)**
- **Pneumonia on regression**



# Lab studies

- **Bacterial culture and tests**

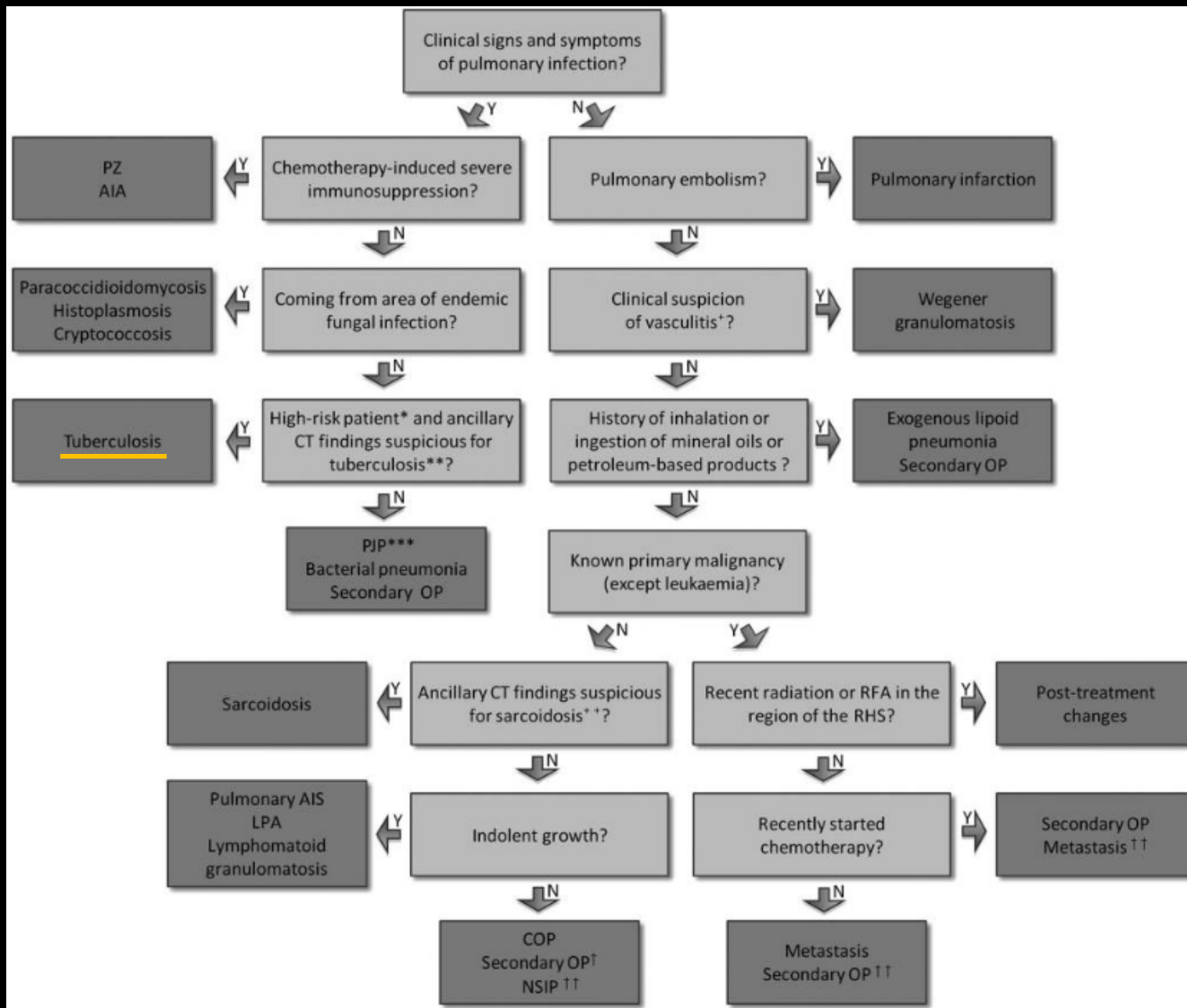
All negative

- **TB Culture (sputum)**

**Mycobacterium tuberculosis complex  
(Isoniazid resistance)**

# Reverse halo sign

- Also known as “atoll sign”
- Central ground-glass opacity surrounded by denser consolidation of crescentic shape on HRCT
- Classic feat. of **cryptogenic organizing pneumonia (COP)**
- Other etiologies:
  - Invasive fungal pneumonia (eg. pulmonary zygomycosis)
  - Organizing pneumonia, PJP, TB
  - Sarcoidosis
  - Wegener granulomatosis
  - Lymphomatoid granulomatosis (EBV)
  - Pulmonary embolism (septic)
  - Radiofrequency ablation etc.



- **Imaging features favoring TB over COP**
  - ✓ **Nodular walls (indicating active granulomatous disease)**
  - ✓ **Nodules within the reverse halo lesion**
  - ✓ **Centrilobular nodules**
  - ✓ **Pattern of endobronchial spread (tree-in-bud sign)**

