與大師對談

許清寅教授

2022-03-15

報告人: R2 蔡承杰

規則介紹

- 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。
- 針對胸腔系統影像判讀。
- 大師評論本院影像品質建議及改進。

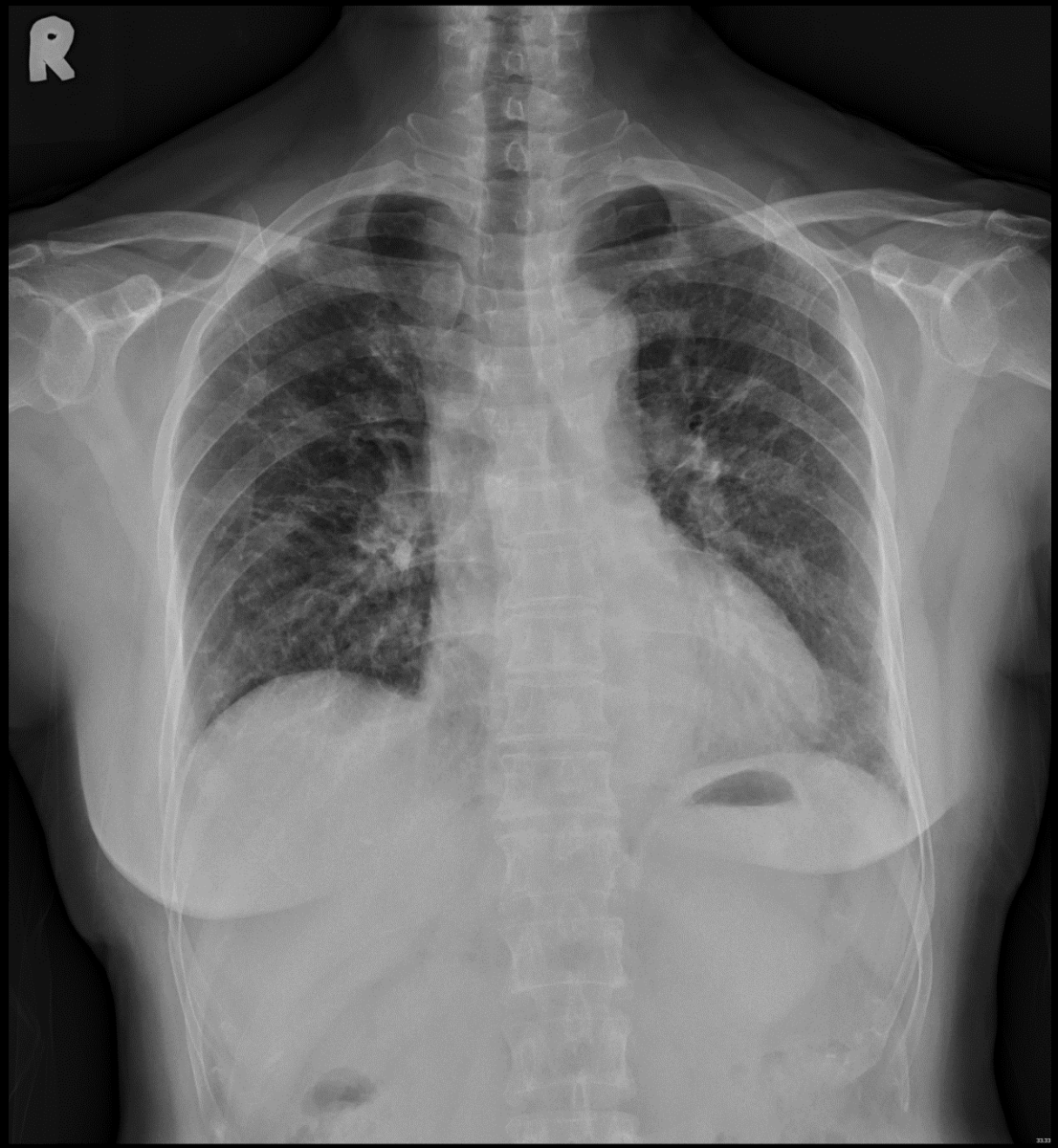
CASE 1

Case 1

- 72 y/o female
- S: Mild respiratory distress
- O: SpO2 95% under room air

- 2021-12-02 CXR
- 2021-12-31 Chest HRCT

2021-12-02 CXR



2021-12-31 HRCT

Differential diagnosis

- Post-COVID 19 fibrotic change
- Non-specific interstitial pneumonia (NSIP)
- Fibrosing hypersensitivity pneumonitis
- Usual intetstitial pneumonitis (UIP)
- CTD-ILD

Diagnosis

- Post-COVID 19 fibrotic change

簽收日期	1100630	1100622	1100611	1100607
簽收時間	1131	1322	1459	1338
工作單號	5900027255	5900025648	5900023502	5900022622
試管編號	5900027255	5900025648	5900023502	5900022622
報告日期	1100630	1100622	1100611	1100607
報告時間	1612	1721	2238	1914
(法傳)新冠肺炎核酸檢測	Negative	Negative	Positive	Positive
陽性Ct值	E:-, R:-, N:-		E: 27.02, R: 31.35, N: 32.01	E:23.58, R:28.14, N:29.33

CT of Post-Acute Lung Complications of COVID-19

Radiology

REVIEWS AND COMMENTARY • REVIEW

CT of Post-Acute Lung Complications of COVID-19

Joshua J. Solomon, MD • Brooke Heyman, MD • Jane P. Ko, MD • Rany Condos, MD • David A. Lynch, MB, BCh

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Conflicts of interest are listed at the end of this article.

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- Reticular abnormality was found at about 2 weeks after onset of symptoms in seven of 20 patients who had isolated abnormality at baseline CT
- The most common findings at follow-up were GGO and subpleural parenchymal bands

Research

JAMA | Original Investigation

Four-Month Clinical Status of a Cohort of Patients After Hospitalization for COVID-19

The Writing Committee for the COMEBAC Study Group

Editorial page 1511

Supplemental content

IMPORTANCE Little is known about long-term sequelae of COVID-19.

OBJECTIVE To describe the consequences at 4 months in patients hospitalized for COVID-19.

- 171 patients imaged 4 months after hospitalization found abnormalities in 76% of intubated patients and 58% of nonintubated patients.
- The most common abnormality: GGO (63%), but 19% (33/171) had fibrotic lesions predominately in a subpleural location involving less than 25% of the lung parenchyma.
- Prevalence of fibrotic abnormalities was higher in those who had ARDS

CT of Post-Acute Lung Complications of COVID-19

Radiology

ORIGINAL RESEARCH • THORACIC IMAGING

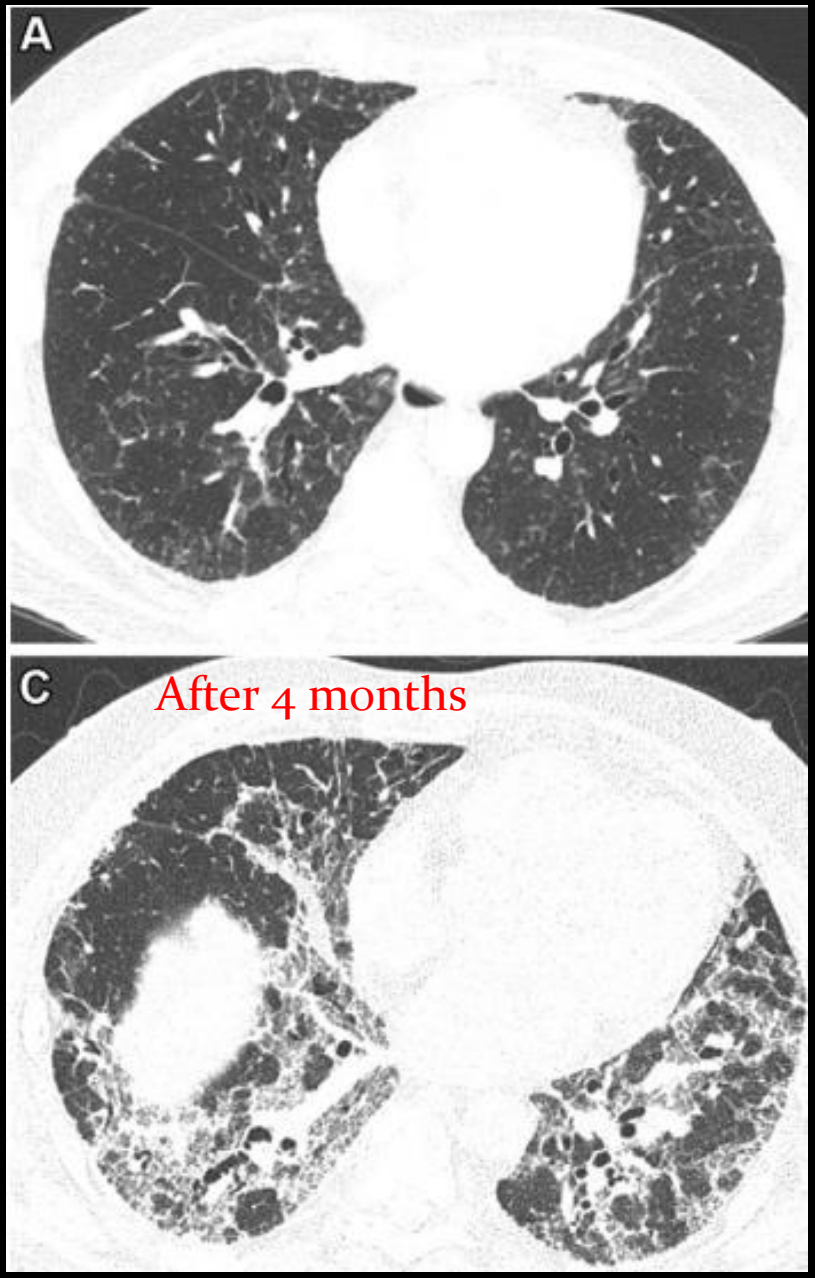
Six-month Follow-up Chest CT Findings after Severe COVID-19 Pneumonia

Xiaoyu Han, MD, PhD • Yanqing Fan, MD* • Osamah Alwalid, MD, PhD • Na Li, MD • Xi Jia, MD • Mei Yuan, MD • Yumin Li, MD, PhD • Yukun Cao, MD • Jin Gu, MD, PhD • Hanping Wu, MD, PhD • Heshui Shi, MD, PhD*

6-month follow-up study of 114 survivors of severe COVID-19 pneumonia

- 35% had CT evidence of fibrotic-like changes (traction bronchiectasis, parenchymal bands and/ or honeycombing) and a portion of these had ↓ in DLCO
- GGO present in 21%, but the extent of GGO and consolidation was clearly ↓ from baseline, but the prevalence of reticular abnormality increased from baseline
- Predictors of fibrotic-like changes at 6 months: ARDS, extensive baseline CT abnormality, noninvasive mechanical ventilation, prolonged hospital stay, > 50 y/o

CT of Post-Acute Lung Complications of COVID-19



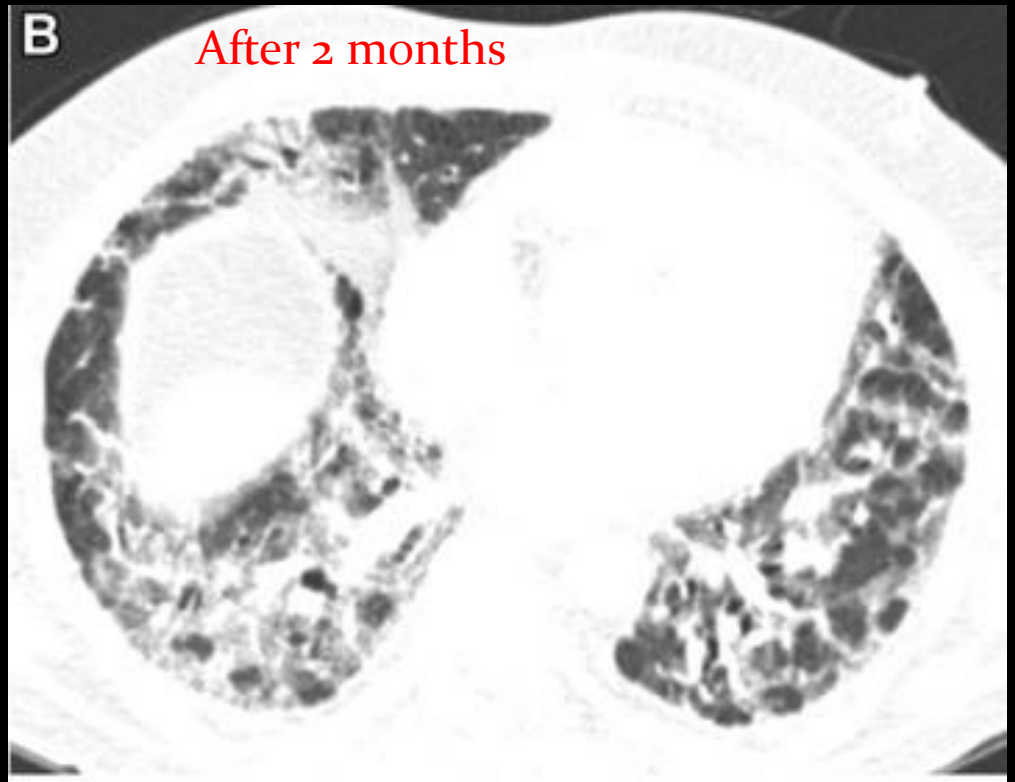


Figure 3: Images show progressive pulmonary fibrosis in a 67-year-old man with a history of relatively mild, stable, fibrotic hypersensitivity pneumonitis. **(A)** Baseline axial CT shows mild ground-glass and reticular abnormality. **(B)** Axial CT angiogram obtained 2 months after infection shows substantially increased reticular abnormality with mild traction bronchiectasis. **(C)** Axial CT obtained 2 months later shows increased traction bronchiectasis indicating progressive fibrosis.

CT of Post-Acute Lung Complications of COVID-19

- The most common abnormalities
  - ✓ Ground-glass opacity (GGO)
  - ✓ Parenchymal bands
  - ✓ Reticular abnormality
  - ✓ Traction bronchiectasis, and mosaic attenuation
- Longitudinal studies suggest that GGO can be replaced with fibrotic-appearing abnormalities, and abnormalities may persist with known risk factors