



Diagnosis and management of multi-synchronous lung adenocarcinoma

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LEARNING GOALS

Goal 1: Understanding the diagnostic flow and clinical staging of patients presenting with multiple lung nodules that are suspected of multi-synchronous lung adenocarcinomas.

Goal 2: Recognizing how to distinguish multi-synchronous lung cancers from lung-to-lung metastasis clinically.

Goal 3: Choosing which lung cancer to treat first and which treatment modality should be administered with consideration of further management of other multiple lesions.

Goal 4: Understanding multi-disciplinary management and staged treatment strategies for curative intent.

BACKGROUND

J.K is a 55-year-old woman with no smoking history and a negative familial history of lung cancer.

On her routine health check-up, she presented with abnormal chest X-ray findings of of suspicious nodular opacity.

She did not have any respiratory symptoms or recent weight loss.

Due to the abnormal chest X-ray that revealed a nodular lesion at the right middle lung zone, she was recommended to undergo a chest CT.

CURRENT PRESCRIPTIONS

- none

COMORBIDITIES/MED HX

- none

OVERALL

DIAGNOSIS

Probable multi-synchronous early-stage adenocarcinomas and multifocal pre-cancerous lesions in both lungs.

TESTING

CT SCAN: CHEST

Findings:

- Multifocal subsolid nodules (up to 10) in both lungs.
- The largest nodule was 1.8cm at the right upper lobe (RUL) with mixed solid proportions and minor fissure retraction (**Figure 1a**).
- The second largest nodule was located at the left upper lobe (LUL) with a total size of 1.5cm with 6mm solid portions (**Figure 1b**).
- Other subsolid nodules varied in size and solid portions ranging from 6mm without any solid portion to 10mm with 4mm of solid portion.
- No enlarged mediastinal lymph nodes were detected.



Figure 1a. RUL nodule



Figure 1b. Nodules at LUL and RLL

THE AMAZING CASE RACE

CASE STUDY 04

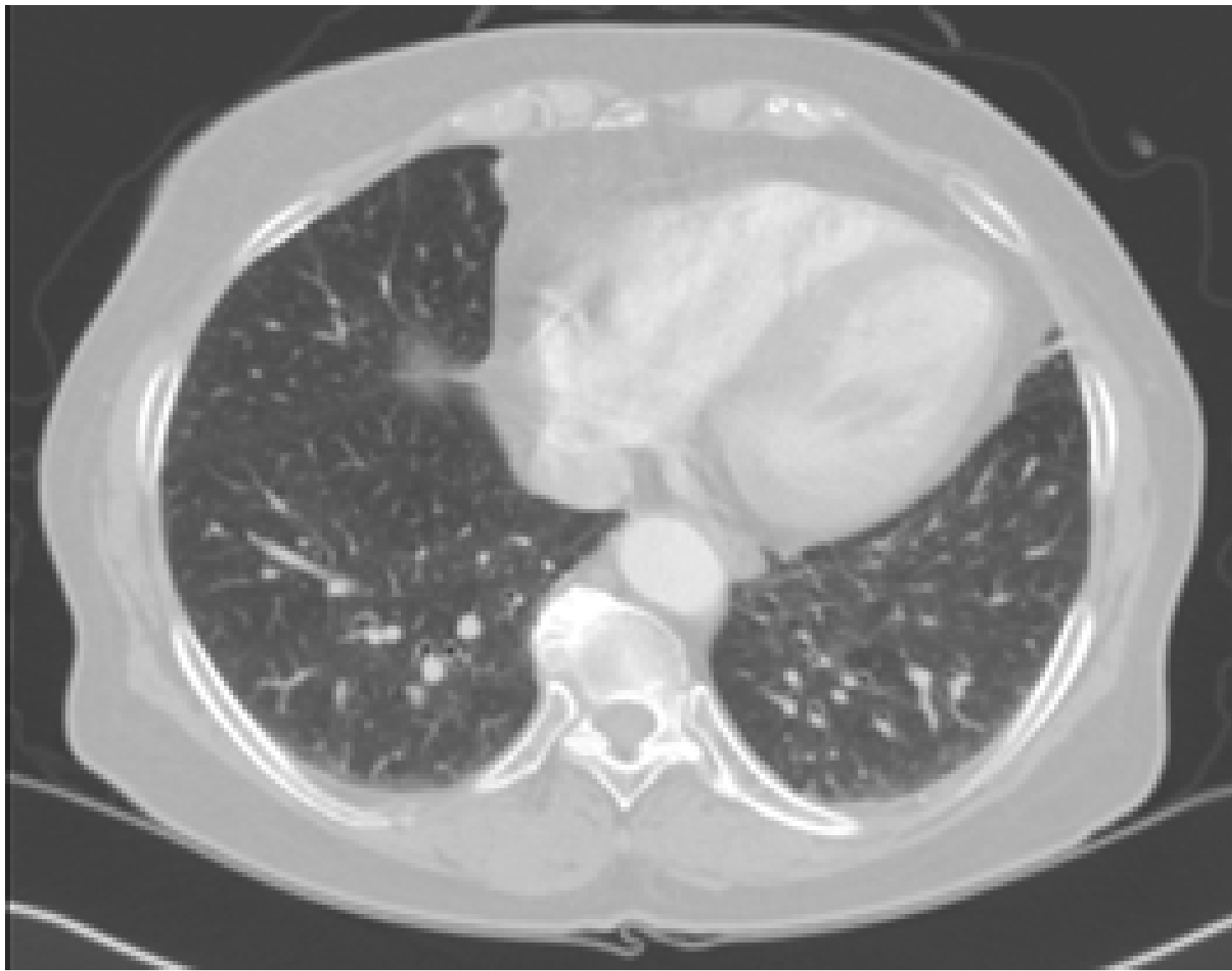


Figure 1c. Other subsolid nodules at BLL

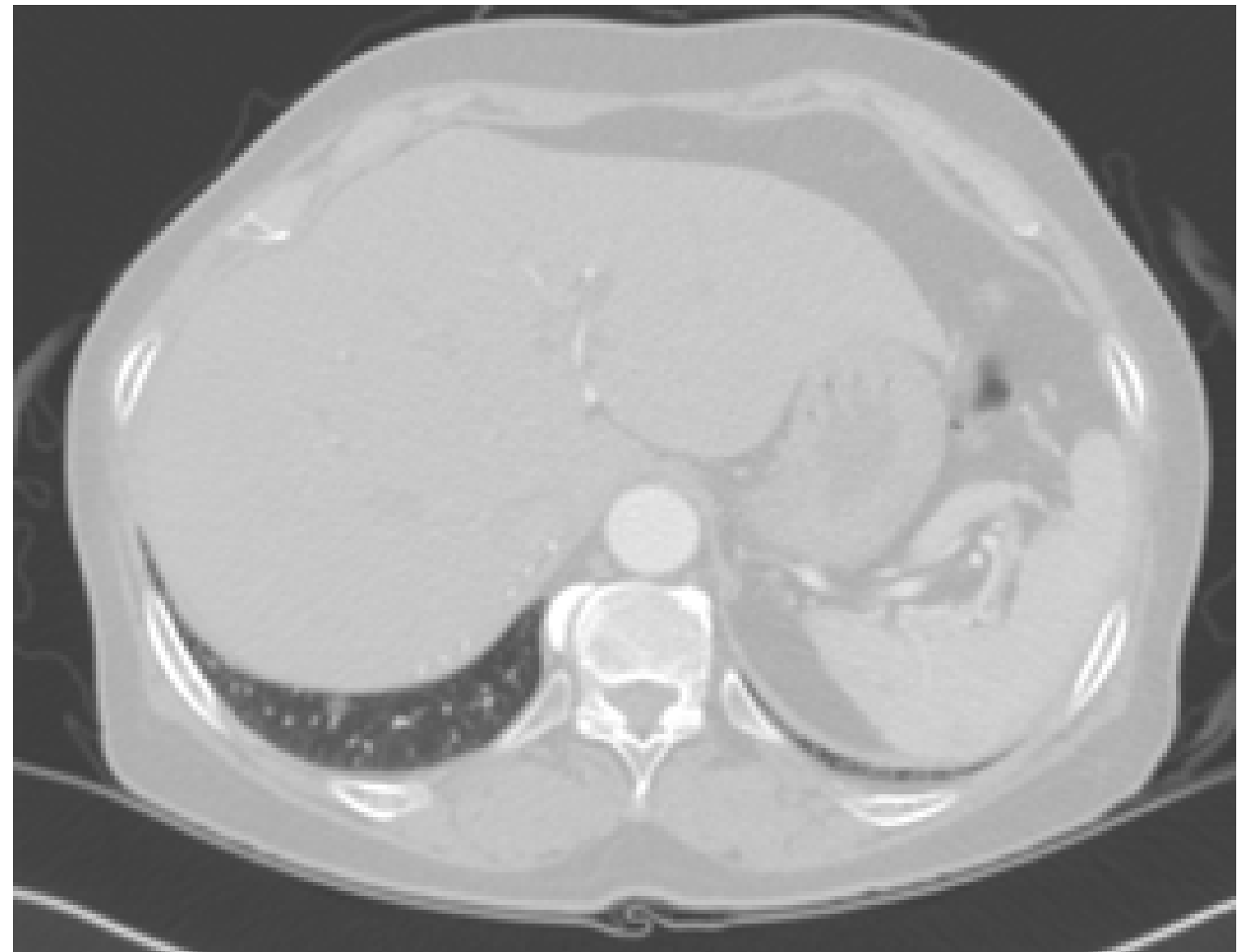


Figure 1d Other subsolid nodules at RLL

ADDITIONAL TESTING

WHOLE BODY PET SCAN

Revealed mild uptake of the right upper lobe nodule (max SUV 1.5) and subtle uptake of the left upper lobe nodule (max SUV 0.8). No abnormal FDG uptake was observed in other multifocal subsolid nodules in both lungs or mediastinal lymph nodes (**Figures 2a-b**).

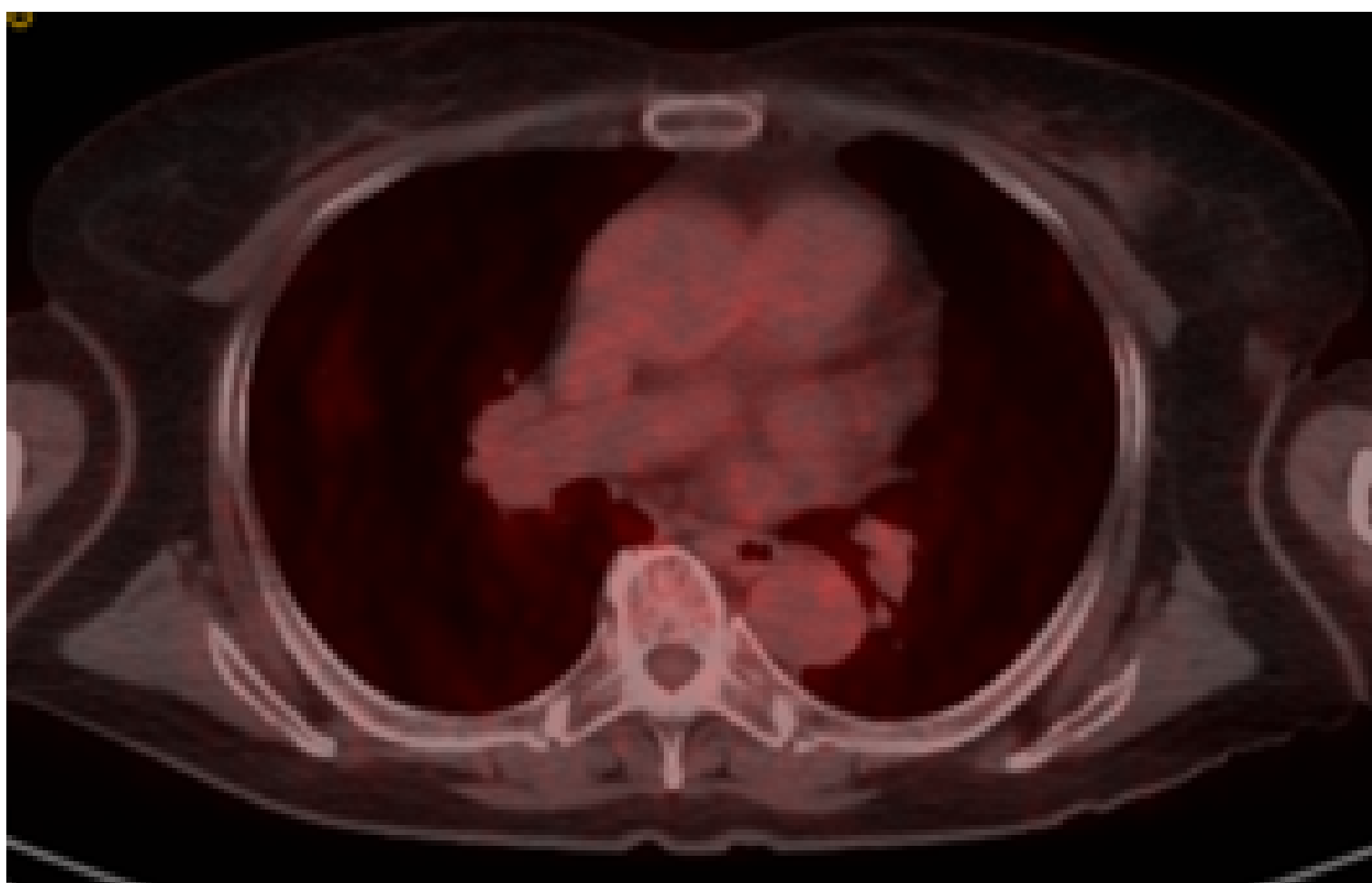


Figure 2a

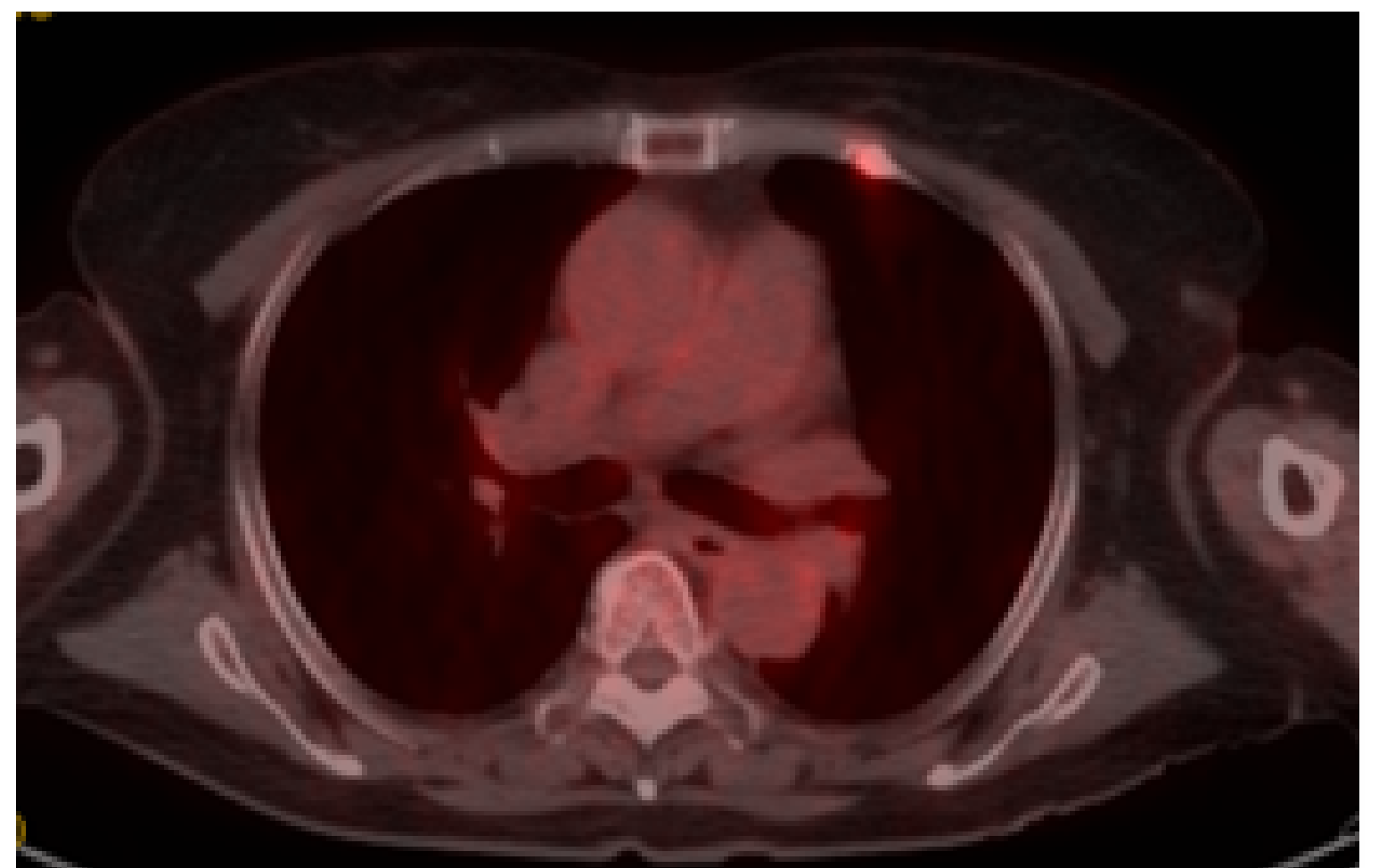


Figure 2b

THE AMAZING CASE RACE

CASE STUDY 05

IASLC



INTERNATIONAL
ASSOCIATION
FOR THE STUDY
OF LUNG CANCER

BRAIN MRI
STAGING

CONSIDERATIONS

Want to learn more

about this case?

VOTE FOR CASE 05

CONTRASTED CT BRAIN

Scan was normal.

Figure 3

Figure 2

CONTRASTED CT THORAX

Scan showed an irregular soft tissue mass measuring 9.3 x 4.7 x 7.1 cm seen centered in the upper lobe abutting the mediastinal pleura, involving the left perihilar region and superior segment of left lower lobe with multiple satellite nodules scattered in both lungs. Small left pleural effusion. There are also enlarged mediastinal, left hilar and left supraclavicular lymph nodes..