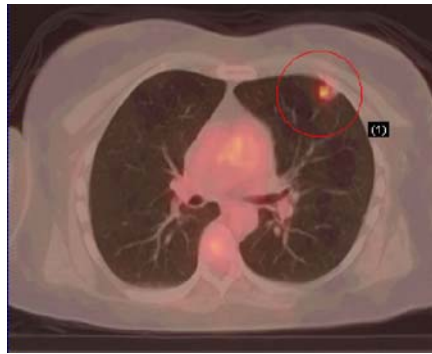


PETIMAGING

INTEGRATED PET/CT SCANNING CASE STUDY N^o 64

Solitary Pulmonary Nodule with a History of Cancer

A 56 year old female with a complicated medical history including renal cell carcinoma presents to the hospital with chronic back pain due to a herniated disk, a chronic cough, and a headache in the “front part of her head”. She is admitted to the hospital for further work-up, and a chest x-ray reveals a 1.3 cm left upper lobe pulmonary nodule which is confirmed on chest CT. A CT-guided biopsy is conducted with subsequent pneumothorax and chest tube placement. The biopsy is indeterminate as are two additional biopsies due to inaccessibility of the nodule. PET/CT, ordered for characterization, reveals increased uptake in the 1.5 x 1.6 cm nodule.



As well, PET/CT images of the brain, performed due to the patient’s complaints of a headache, show an area of edema concerning for metastatic disease in the right parieto-temporal region. An MRI performed two days later reveals a 2.1 cm enhancing mass in the right temporal lobe which is highly suspicious for metastatic disease.

