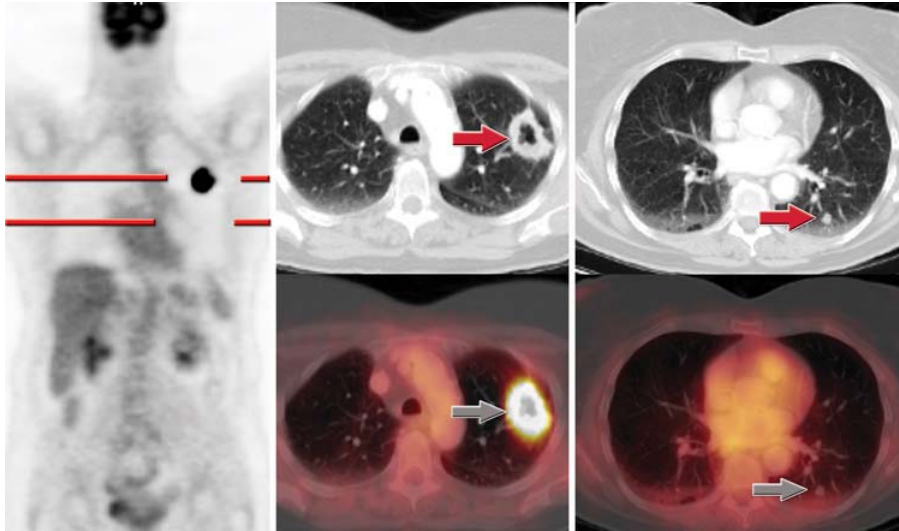


Case #3 - Summary Sheet



Case Description:

HISTORY:

70 year old woman with newly diagnosed cavitary lesion of the left lung referred for staging PET•CT.

IMAGING FINDINGS:

There is intense increased FDG activity identified corresponding to a large cavitary lesion in the left upper lobe of the lung. There is a small nodule at the left lung base in the left lower lobe which does not show significant increased FDG uptake. There is a subcentimeter nodule identified in the left upper lobe which is too small to be reliably evaluated by the PET scan as it is below the resolution of the PET scanner. There is nonspecific mild increased FDG uptake identified corresponding to the right lobe of the thyroid gland.

DIFFERENTIAL DIAGNOSIS:

Squamous cell carcinoma.
Abscess.
Other benign cavitary lesion.

TREATMENT:

Left upper lobectomy and wedge resection of left lower lobe nodule.

DISCUSSION:

This patient was referred for PET•CT after having a CT scan that showed a cavitary lesion in the left upper lobe and a small nodule (1cm) in the left lower lobe. The PET•CT showed very intense FDG uptake in the left upper lobe cavitary lesion and minimal or no FDG uptake in the left lower lobe nodule.

The surgeon decided to do a left upper lobectomy and wedge resected the lower lobe lesion. A subsequent pathology report, showed that PET•CT correctly identified the lower lobe lesion as a benign process.

For lesions smaller than this, interpreting physicians should use caution in determining whether something is benign or malignant because the FDG uptake within smaller lesions <1cm will be underestimated due to partial volume averaging.

Data courtesy of Dr. Todd Blodgett, University of Pittsburgh Medical Center

Any of the protocols presented herein are for informational purposes and are not meant to substitute for clinician judgment in how best to use any medical devices. It is the clinician that makes all diagnostic determinations based upon education, learning and experience.

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