



EXAM: PET/CT IMAGING FOR SPN

HISTORY: Spiculated 15 mm LUL nodule on recent CT 09/14/06, nature indeterminate.

TECHNIQUE: 11.47 mCi of FDG were injected with a fasting blood sugar of 112 mg/dl followed by dedicated PET images from skull base to mid-thigh, and axial CT for coregistration.

FINDINGS

NECK/CHEST: There are three hypermetabolic lung nodules located in left pulmonary apex, left upper lobe anteriorly, and right upper lobe. These are irregular and indistinct with soft margins. Left apical nodule measures 8 mm, LUL nodule just above lingula measures 16 mm. RUL nodule is indistinct and has infiltrative characteristics. PET-labeled aspect approximates 9 mm. SUV of the largest, LUL nodule is 4.5. Findings represent either multicentric lung malignancy such as bronchoalveolar cell carcinoma as suggested by anatomic appearance, or metastatic disease. Small cell carcinoma is considered less likely since these are usually more metabolically active. There is intense uptake marginating wall of thoracic aorta consistent with endothelial atheromatous inflammation. No hilar or mediastinal metastatic adenopathy. On fused CT, there are several nonspecific, nonaggregated nodes which as a cluster, are ametabolic. Moderate-sized hiatal hernia. No pleural effusion.

ABDOMEN/PELVIS: There is normal physiologic, low-level tissue metabolic background activity present throughout the abdomen and pelvis with no evidence of primary or metastatic malignancy. Prominent small bowel physiologic activity. Surgical clips in gallbladder fossa. Nonobstructing left renal caliceal calculus. No retroperitoneal or mesenteric adenopathy.

SKELETON: There is normal, physiologic, low-level skeletal background activity present without any evidence of bony metastatic disease.

CONCLUSION:

1. Three hypermetabolic lung nodules consistent with multicentric lung primary (with bronchoalveolar cell carcinoma primary consideration), or possibly metastatic disease. However, no extrathoracic potential primary tumor is identifiable on PET.
2. Intense endothelial atheromatous aortic arch inflammatory uptake.

Contact Specialty Teleradiology at 888-671-1076 with any questions or comments about this report.