

MEDICAL REPORT

PATIENT NAME	
P. ID	
EXAMINATION DATE	
DOB	

Procedure: 18F-FDG PET/CT scan

Cc: Prof.Dr.Dr.Dr.Zamboglou N., Dr. Demetriou E.

Medical History: ADC of the RtLL provoking obstruction of the superior lobar bronchus and stenosis of the middle; the primary is in contact to pleura and it is accompanied by suspicious contralateral lung lesions, mediastinal and cervical lymphadenopathies and possible left adrenal deposit.

Indication/Medical question: Staging.

Patient's personal data: Weight= 54 Kg, Height= 172 cm, Serum glucose (immediately prior to injection) = 129 mg/dl

Technique: Imaging was performed 60 minutes after intravenous administration of 187 MBq 18F-FDG (Fludeoxyglucose). Images were acquired using a Discovery IQ PET/CT system (3 rings; 16 slices) of General Electric. The images were obtained from skull-base to mid-thighs in supine position with elevated arms. Axial, sagittal and coronal PET reconstructions with and without attenuation correction were performed. Corresponding CT images were reviewed in axial, coronal and sagittal planes. The CT scan was a limited non-contrast study for the purposes of anatomical correlation and attenuation correction (only pertinent findings will be reported). This resulted in a total DLP of the CT-examination of 498 mGy-cm. All SUV measurements provided are given as SUV Peak (as measured in the MAC+SIR reconstruction using commercially available software) unless otherwise stated.

Comparison: B-MRI of 19.05.2020, C-CT of 17.05.2020 and external N/C-CT of 11.05.2020.

Findings:

Average SUV of the live 1,8.

Skull base/Neck:

Visualised mastoid cells and paranasal sinuses free. Discretely hypermetabolic left parotid nodule (SUV=3,0; Se1401/Im12 and Se3/Im28; 13x10mm) compatible to Warthin's tumour. Bilateral supraclavicular lymph nodal metastases R>L with high FDG-uptake (SUV= 8,7; Se1401/Im41 and Se3/Im107; 28x18mm). Non-hypermetabolic nodule of the left thyroid lobe. Asymmetrical FDG uptake of the vocal cords (S 1401/36), compatible to laryngeal nerve palsy right (Se15/Im10/13x10mm).

Thorax:

Intensely hypermetabolic malignancy of the right lung affecting the LtLL & ML measuring approx. 7.5 cm in greatest metabolically active dimension, presenting central necrosis (SUV=13; Se1401/Im85). Non-hypermetabolic subpleural nodule of the ML (Se16/Im108) and LtLL (Se16/Im197). Intensely hypermetabolic mediastinal lymph nodes of stations 1, 2R/L, 3A, 4R/L, 7, 10R/L; the most active is a lesion of the station 10L (SUV=12; Se1401/Im77). Discretely hypermetabolic nodule adjacent to the posterior wall of the ascending aorta (SUV=3,6; Se1401/Im80 and Se15/Im54; 13x7mm) suspicious of pericardiac deposit. Absence of pleural or pericardiac effusion. Normal appearance of the axillary lymph nodes.

Abdomen/Pelvis:

Physiological and homogeneous hepatic metabolism. Highly hypermetabolic lesion of the upper pole of the right kidney (SUV=10; Se1401/Im114) morphologically evident on external CT of 08.05.2020. Voluminous, intensely hypermetabolic left adrenal metastasis (SUV=14; Se1401/Im122 and Se15/Im115; 49x25mm). Retroperitoneal lymph nodes with intense FDG-avidity affecting the left renal hilum and ipsilateral lateroaortic groups; the most active is a lesion of the left renal hilum (SUV=12; Se1401/Im139 and Se3/Im361; 22x17mm). Highly FDG-avid structure of the pelvis left (SUV=5,7; Se1401/Im196 and Se3/Im510; 18x13mm) that could correspond to adnexal activity.

Musculoskeletal system:

No suspicious FDG foci in the skeleton.

Impression

1. FDG-avid ADC affecting the RtLL and ML, accompanied by lymph nodal metastases of the right hilum, ipsi- and contra-lateral mediastinal and of the supraclavicular groups bilaterally.
2. FDG-avid nodule adjacent to the posterior wall of the ascending aorta, suspicious of cardiac metastasis. Cardiac MRI suggested.
3. Right renal, left adrenal and retroperitoneal spread.
4. T4N3M1c/Stage IVB (AJCC 8th edition).
5. Secondary findings: Possible laryngeal nerve palsy right.

With kind regards,



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