

Patient Id:	S4H7801	Age & Sex:	68 Years / F
Patient Name:	ATTARID SUBHI NAJI	Study Date:	05-Dec-2024
Referring Dr.:	DR RAJESH KUMAR	Reported Date:	05-Dec-2024

### **18F-FDG WHOLE BODY POSITRON EMISSION TOMOGRAPHY WITH CONTRAST CT SCAN**

**PROTOCOL:-** Whole body PET/CT scan was done following intravenous administration of 6.6 mCi 18F-FDG on GE Gen2 DIQ 32 slice PET/CT scanner.

Imaging was performed on PET scanner with Multidetector Computerised Tomography (MDCT). IV contrast was administered following eGFR calculation (99).

65 ml of Omnipaque IV contrast was given to the patient.

Scanning field: Eyes to mid-thigh with HRCT lung and separate CT series for brain.

A semiquantitative analysis of FDG uptake was performed by calculating SUV corrected for dose administered and patient lean body mass (Weight: 57 kg, Height: 155 cm). The blood sugar at the time of tracer injection was 144 mg/dl.

Allergic reaction: No

**CLINICAL PROFILE:-** Patient is a suspicious case of Carcinoma left breast. PET/CT scan is being done for pretreatment staging.

The overall bio distribution of FDG is within normal physiological limits.

#### **Primary Site:**

FDG avid (SUV max – 4.2) nodular enhancing stromal thickening, measuring ~ 2.8 x 1.8 x 2.7 cms in size is seen at 2 o'clock position in left breast. Few faintly FDG avid subcentimeter sized perilesional satellite nodules are noted. Overlying skin and myofascial fat planes appear unremarkable.

Few FDG avid (SUV max – 4.3) discrete & coalescent left level I & II axillary lymph nodes are noted, largest measuring ~ 2.6 x 1.5 cms in size compressing on left axillary vein.

No FDG avid or size significant left supraclavicular or internal mammary lymph node is noted.

#### **Metastatic Survey:**

**Skeleton:** Few (>5 in number) FDG avid (SUV max – 8.1) osteolytic lesions are seen in dorso-lumbar vertebrae, left ala of sacrum, bilateral iliac bones and roof & posterior pillar of left acetabulum. Rest of the bones under survey appear normal and show normal FDG uptake.

**Brain:** The supra and infra tentorial brain parenchyma appears unremarkable. There is no ICSOL seen. The ventricular system appears normal. The brain parenchyma demonstrates normal FDG uptake. *MRI is a better modality to evaluate brain metastases.*

**Head and Neck:** *Diffusely increased FDG uptake is seen in bilateral tonsils with faintly FDG avid bilateral cervical lymph nodes – likely inflammatory.*



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Bilateral paranasal sinuses appear clear. The nasopharynx including the fossae of Rosenmuller is normal. The oral mucosa and the tongue appear normal.

Both lobes of the thyroid gland appear normal in size and demonstrate physiological FDG uptake. Rest of head and neck structures appear unremarkable.

**Thorax:** The heart and mediastinal vascular structures appear normal. The trachea and both main bronchi appear normal.

**Lungs:** Bilateral lung fields appear normal. There is no pleural or pericardial effusion noted.

**Right breast and axilla** appear unremarkable.

**Abdomen:** *The liver is enlarged in size and measures ~20.3 cms in craniocaudal extent.* The hepatic parenchyma demonstrates normal attenuation. The intra hepatic biliary radicals are not dilated. The portal vein is normal. No abnormal FDG accumulation is seen in the liver parenchyma.

Spleen, Pancreas and both Adrenal glands appear normal in bulk and demonstrate physiological FDG uptake.

Bilateral kidneys appear normal in size. Bilateral ureters are defined. Urinary bladder is normal in shape, size and distention.

The stomach appears unremarkable. The small and large bowel loops appear normal in caliber and fold pattern and shows physiological FDG uptake.

*Few faintly FDG avid subcentimeter sized left common iliac lymph nodes are noted – **likely non-specific.***

Uterus & adnexae appear unremarkable.

**Opinion:** In this suspicious case of Carcinoma left breast, PET/CT scan findings reveal FDG avid nodular enhancing stromal thickening at 2 o'clock position in left breast with few faintly FDG avid subcentimeter sized perilesional satellite nodules with few FDG avid discrete & coalescent left axillary lymph nodal & skeletal metastases.

No other FDG avid visible disease is seen elsewhere in the regions of the body surveyed.

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