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11 Jul 2024

### PET0006, WB FDG PETCT, ERIS Universal Identifier

F-18 FLUORODEOXYGLUCOSE PET/CT STUDY

# **CLINICAL HISTORY**

is a 49 years old lady with ca right breast. She is status post wide excision of the right breast in Jun 2022 followed by chemotherapy from Jul till Oct 2022 and radiotherapy in Oct 2022. She has been receiving Tamoxifen since Apr 2023. PET/CT to assess disease status.

#### **TECHNIQUE**

Positron emission tomographic (PET) images, coupled with multi-slice low-dose CT scan were acquired 73 minutes after intravenous administration of approximately 281 MBq of F-18 Fluorodeoxyglucose (blood glucose 4.4 mmol/l). CT was used for attenuation correction and anatomical correlation.

### **FINDINGS**

Comparison was made with the previous PET study of 14 June 2022.

## THORAX:

The patient is status post wide excision of the right breast. Surgical clips are seen in the right breast.

Low-grade physiological glandular FDG uptake is noted in both breasts.

The density of low-grade activity in the lower outer quadrant of the right breast (im 3/174, maxSUV 1.7) is more in keeping with post-surgical change.

The low-grade to mildly FDG-avid cutaneous thickening overlying the right breast is also in keeping with post-treatment change.

No abnormal FDG-avid focus is seen in the left breast.

The right axillary nodes of negligible to low-grade activity are more in keeping with reactive nodes (maxSUV 1.7).

No FDG-avid internal mammary or mediastinal nodes are noted.

The left axillary nodes, bilateral subcentimeter lower paratracheal nodes and subcentimeter aortopulmonary window node of negligible to low-grade activity are more in keeping with reactive nodes.

No abnormal FDG-avid focus is detected in both lungs.

The subcentimeter nodule in the left lung apex (im 3/111) is most likely too small to be accurately resolved on PET and is indeterminate.

Mild scarring is noted in the right lung apex, right upper lobe and right middle lobe. No pleural effusion or pericardial effusion is seen.

Low-grade to mild physiological brown fat FDG uptake is noted in the thoracic paravertebral fat planes.

#### HEAD AND NECK:

No FDG-avid supraclavicular nodes are noted.

The mildly FDG-avid right level II cervical node and left level II cervical node (maxSUV 2.5) are most likely inflammatory in origin.

The other bilateral cervical nodes and bilateral submandibular nodes of negligible to low-grade activity as well as the non FDG-avid subcentimeter submental nodes are compatible with reactive nodes.

No abnormal FDG-avid focus is detected in the cerebral hemispheres or cerebellum. The paranasal sinuses and mastoids are clear.

The low-grade to intensely increased FDG activity involving both sides of the nasopharynx, the soft palate, bilateral palatine tonsils, base of tongue, hypopharynx, bilateral aryepiglottic folds, bilateral vocal cords, bilateral parotid glands, bilateral submandibular glands and thyroid gland is more likely to be physiological or inflammatory in origin.

#### SKELETAL SYSTEM AND SOFT TISSUE:

The bone marrow shows normal physiological distribution of FDG activity.

No abnormal FDG-avid skeletal focus is detected. The non FDG-avid sclerotic skeletal foci in bilateral femoral heads are most likely bone islands.

The low-grade to mildly increased activity involving bilateral shoulder regions and the right sternoclavicular joint as well as adjacent to the right greater trochanter is most likely inflammatory in origin.

### ABDOMEN AND PELVIS:

The low-grade to mildly increased gastric activity is most likely physiological in origin.

The segmental low-grade to mildly increased activity along the sigmoid colon, rectum and small bowel loops is more in keeping with physiological bowel uptake.

There are no FDG-avid intra-abdominal, retroperitoneal or pelvic nodes.

The subcentimeter ileocolic nodes, subcentimeter superior mesenteric nodes, subcentimeter aortocaval node, subcentimeter para-aortic nodes, bilateral subcentimeter common iliac nodes, bilateral external iliac nodes and bilateral inguinal nodes of negligible to low-grade activity are in keeping with reactive nodes.

The subcentimeter hypodensity in segment II of the liver is too small to be accurately characterised. No abnormal FDG-avid focus is noted in the liver.

The subcentimeter hypodensity in the pancreas is stable. No abnormal FDG-avid focus is seen in the pancreas.

No ascites or FDG-avid peritoneal nodule is noted. No abnormal FDG-avid focus is seen in the spleen, adrenal glands, adnexal regions and uterus.

A tiny left renal calculus is noted but no hydronephrosis is present. The right renal hypodensity is most likely a cyst. Physiological urinary activity is seen along the urethra.

### **CLINICAL IMPRESSION**

The density of low-grade activity in the lower outer quadrant of the right breast is more in keeping with post-surgical change.

The right axillary nodes of negligible to low-grade activity are more in keeping with reactive nodes. Follow-up is advised.

There is no scan evidence of FDG-avid recurrent malignancy detected elsewhere.

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View Study

Electronically signed by drooi on 11 Jul 2024,