# **Radiology Report**

## **PET-CT Sarcoid**

Patient ARMOUR, Linn Sex Male Date of Birth 04-Apr-1967 Patient Identifier 6333168 (SVHS AUID) Examination PET-CT Sarcoid Modality St Vincent's Health Network Organisation Department СТ Accession Number 2024N0006085-1 St Vincent's Health Sydney Facility Reporting Radiologist WONG, Keith Requesting Provider GIRGIS, Laila 12-Jun-2024 Imaging Date Requested Date 12-Jun-2024 Reported Date 12-Jun-2024 Report Status Final Report Copies To

CARDIAC SARCOID STUDY

Thank you for referring this patient Clinical History: Subacute renal failure, hypercalcaemia, numerous pulmonary nodules, cardiac infiltration on MRI +-----| Diagnostic Summary | | Intense FDG avidity localising to enlarged bilateral hilar and | | mediastinal lymph nodes. Distribution is suggestive of active sarcoidosis | | but histopathological correlation is recommended. In addition, there are | | FDG avid cervical, axillary, upper abdominal and inguinal lymph nodes. | | The left medial supraclavicular or right inguinal lymph node may be | amenable to ultrasound guided biopsy. | The small bilateral pulmonary nodules are FDG avid. This could be related | | to the underlying mediastinal process if sarcoidosis is confirmed. | | No significant FDG avidity within the left ventricular myocardium to | | suggest active myocarditis Myocardial perfusion study is suboptimal due |

| to persistent intense hepatic activity. Normal LVEF. |

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#### MYOCARDIAL PERFUSION SCAN AT REST

Imaging of the heart was performed after 99mTc-Sestamibi injection at rest.

#### Findings:

Difficult examination due to intense adjacent hepatic activity, persisting on prone imaging.

Possible tiny defect at inferior apex but possibly artefactual.

No other wall perfusion abnormality identified.

LVEF measures 70%.

RADIONUCLIDE TOF FDG PET/CT (ITERATIVE) STUDY

The patient was prepared with a low carbohydrate diet for 24 hours and a free fatty acid load 3 hours prior to injection. The patient was given 355 MBq of F-18 FDG (BSL was 4.3 mmol) and dedicated imaging of the heart as well as imaging of the body from the vertex of the skull to the mid thigh was obtained after 63 minutes with concurrent low dose CT for attenuation correction and anatomical localisation. Oral contrast was not administered.

### Cardiac findings:

Good suppression of myocardial glucose metabolism.

Tiny focus of faint activity in the basal septum (SUVmax 2.6) which remains well below background hepatic activity (SUVmax 3.6).

No appreciable FDG avidity elsewhere in left ventricular myocardium.

Extracardiac Thoracic findings:

Extensive intensely FDG avid bilateral hilar and mediastinal

lymphadenopathy. Representative lymph nodes documented below.

Left prevascular with SUV 11.2

Right upper paratracheal with SUV 10.0

Subcarinal 26mm with SUV 10.3

Right hilar with SUV 7.1

Left hilar with SUV 8.0

Bilateral axillary, more intense on right measuring 13mm with SUV 4.7

The small pulmonary nodules noted on recent diagnostic CT in bilateral lungs are mildly FDG avid. For reference, there is a 10mm perifissural nodule in the lateral right middle lobe with SUV 3.0.

There is no pleural or pericardial effusion.

Head and Neck

No abnormal intracranial activity allowing for high physiological cortical activity.

Moderate FDG avidity localising to bilateral supraclavicular nodes

12mm medial left supraclavicular node with SUV 7.4

7mm right medial supraclavicular node with SUV 5.9

Mild FDG avidity localising to other subcentimetre lymph nodes in bilateral neck including submandibular and submental.

Abdomen and pelvis:

Mild FDG avidity localising to subcentimetre periportal (SUV 4.2) and portacaval (SUV 4.8) lymph nodes.

Moderate FDG avidity localising to bilateral distal external iliac and inguinal nodes with right inguinal lymph node measuring 13mm with SUV 6.1.

No abnormal FDG avidity within the liver, spleen, adrenals, pancreas, gallbladder or kidneys.

No splenomegaly.

Small volume left perinephric haematoma, presumably from recent biopsy.

Musculoskeletal:

No FDG avid osseous lesion.

Yours sincerely,

DR KEITH WONG FRANZCR

Principal Result Interpreter - Keith Wong

Report relates to study acquired at: SVH St Vincent's Hospital

Report Comment: