PET-CT WHOLE BODY

Clinical History:

Metastatic carcinoma sigmoid colon; post operative; on chemotherapy; for follow up evaluation.
Scan findings are compared with previous PET CT scan dated: 09/01/2020.

TECHNIQUE:

Whole body PET-CT was done from vertex to mid thigh after injecting 10.5 mCi of F18-FDG and CT images were acquired after injecting IV contrast.
Blood Glucose level: 105 mg/dl.
Serum creatinine: 0.7 mg/dl

PET/CT SCAN FINDINGS:

BRAIN:

Posterior fossa structures including fourth ventricle are normal.
Ventricular system is normal.
Cerebral parenchymal shows normal grey and white matter differentiation.
No focal lesions.
Cortical sulci, sylvian fissures and basal cisterns are normal.
No midline shift / extra-axial collection.
Brain parenchyma shows physiological FDG distribution.

HEAD & NECK:

Interval new FDG avid left supraclavicular lymph node noted, largest measuring 1.1 x 1.5 cm (SUVmax: 13.1) – Likely metastatic.

Densely calcified shrunken left eye ball as before – ? Phthisis Bulbi.

Report prepared on 07/04/2021 02:52:33 PM Prepared By HRU
Non FDG avid small mucosal polyp noted in left maxillary sinus as before
— Likely benign.

Rest of the neck spaces are normal.
Rest of the head & neck structures appears metabolically inert.
No other significantly enlarged or metabolically active cervical lymphadenopathy seen.
Physiological tracer activity seen in pharyngeal tonsils, vocal cords and salivary glands.

CHEST:

Previously documented multiple FDG avid parenchymal nodules noted in both lungs shows overall significant increase in size, numbers and metabolic activity.
Largest nodule seen in superior segment of right lower lobe measuring 2.1 x 1.4 cm;
Previously 1.4 x 1.1 cm (SUVmax : 6.3; Previously : 2.0).

Interval new FDG avid small volume mediastinal nodes seen in right hilar and subcarinal regions, largest one measuring 1.0 x 0.8 cm (SUVmax : 10.1) — Likely metastatic.

Persistent non FDG avid calcified lymph nodes noted in subaortic region as before.

Rest of the lung parenchyma appears metabolically inert. No nodularity seen.
Rest of thoracic structures appears metabolically inert.
No evidence of pleural effusions / thickening.
 Mediastinal vascular structures are normal.
No other significantly enlarged or metabolically active mediastinal lymphadenopathy seen.
Physiological FDG disribution is seen in myocardium.

ABDOMEN:

Previously documented FDG avid sigmoid colon mass is not evident in present scan — Post operative status.

Colostomy noted in left iliac region.
Interval multiple new soft tissue omentoperitoneal deposits noted in pelvis, left paracolic gutter and in infracolic omentum beneath anterior abdominal wall. Largest lesion seen in left paracolic gutter adjacent to colostomy measuring 2.0 x 1.5 cm (SUVmax : 12.1) – Metastatic.

An interval new FDG avid soft tissue deposit noted in umbilicus approx. measuring 1.1 x 1.1 cm (SUVmax : 6.3) – Metastatic.

Previously documented multiple FDG avid metastatic hypodense lesions in both lobes of liver shows overall interval increase in size, number and metabolic activity. Few areas of conglomeration noted. Largest lesion noted in caudate lobe measuring 5.9 x 5.6 cm; Previously 2.5 x 2.0 cm (SUVmax : 20.2; Previously : 13.6).

Previously documented residual FDG avid lymph nodes in left common iliac region shows near complete resolution in present scan. However, multiple interval new FDG avid lymph nodes noted in para-aortic, aortocaval, mesocolon and left external iliac region, largest in left external iliac region measuring 1.3 x 1.5 cm (SUVmax : 7.7). – Metastatic.

No abnormal metabolic activity noted in rest of the abdomino-pelvic structures.
No evidence of free fluid in abdomen.
Peritoneal fat planes are normal.
No other significantly enlarged or metabolically active abdomino-pelvic lymphadenopathy seen.
Physiological FDG distribution noted in liver, spleen, stomach & gut.

*Multiple simple cortical cysts noted in both kidneys as before.*
Urinary excretion noted in kidneys and urinary bladder.

**BONES:**

Multiple interval new FDG avid skeletal lesions with subtle sclerotic changes noted in D2, D6, D7, D9 to D11, L2, L3 vertebrae, sacrum, right iliac bone and left femur. Maximum uptake noted in D7 vertebra (SUVmax : 17.0).

Rest of the skeleton show no metabolic abnormality.
IMPRESSION:

IN KNOWN CASE OF METASTATIC CARCINOMA SIGMOID COLON,
PRESENT COMPARATIVE PET CT SCAN SHOWS:-

- STATUS POST EXCISION OF SIGMOID COLON PRIMARY.
  NO EVIDENCE OF RECURRENCE ALONG THE RECTAL STUMP.

- INTERVAL RESOLUTION OF LEFT COMMON ILIAC NODES. HOWEVER,
  MULTIPLE NEW NODES NOTED IN PELVIS, RETROPERITONEUM,
  MEDIASTINUM AND LEFT SUPRACLAVICULAR REGION.

- INTERVAL OVERALL SIGNIFICANT INCREASE IN METASTATIC
  INVOLVEMENT OF LUNGS, LIVER AND NEW APPEARANCE OF
  SKELETAL LESIONS AS DESCRIBED.

FEATURES OVERALL SUGGESTIVE OF PROGRESSIVE DISEASE.

KINDLY CORRELATE.

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(Please note: Routine whole body PET CT oncology protocol does not include lower limbs.
It is included only on clinician request or as per clinical status.
PET CT is not very sensitive for brain metastases and MRI is indicated whenever suspicion
is high and clinically warranted.)