CT AORTA

DISSECTION:
There is a Stanford type A/B aortic dissection originating [] and terminating [].
Dissection flap does not extend to aortic root, coronary arteries, arch vessels, or major intra-abdominal branches.
Patent/thrombosed false lumen.
Enlarged false lumen with compression of true lumen.
Equal opacification of true and false lumens suggesting fenestrations.
Distal opacification of false lumen suggesting fenestrations.
[] arteries arise from true lumen and are patent.
[] arteries arise from false lumen and are occluded/patent.
Dissection flap near origin of [] arteries which is occluded/patent.
Dissection extends to origin of/proximal aspect of [] arteries which are occluded/patent.
Patent arch vessels and major intra-abdominal arterial branches.
No peri-aortic or mediastinal hemorrhage.
No pericardial effusion.

ANEURYSM:
Abdominal/thoracic fusiform/saccular aortic aneurysm extending from [] to [].
Measures [] x [] x [] cm.
Eccentric intramural thrombus.
Thoracic aortic measurements as follows.
Aortic annulus:
Aortic root:
Sinotubular junction:
Ascending aorta at level of right pulmonary artery:
Descending aorta at level of right pulmonary artery:
Aorta at hiatus:

ENDOGRAFT:
[Aorto bi-iliac] Endovascular stent graft repair of thoracic/abdominal aortic aneurysm/dissection extending from [] to [].
Excluded aneurysm sac (or thrombosed lumen) measures [] cm.
No evidence for endoleak.

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CT CHEST SCREEN

FINDINGS: Evaluation of the soft tissues is limited with low dose CT technique.

Lung nodule:

Nodule#1
Image number/series:
Lobe:
Location:
Diameter: mm
Density:
Margin:
Calcification:
Other significant features:

Nodule#
Image number/series:
Lobe:
Location:
Diameter: mm
Density:
Margin:
Calcification:
Other significant features:

Miscellaneous:
  x pulmonary emphysema in the lung parenchyma.
No other abnormality in the pulmonary parenchyma.
No pleural fluid effusion.
No significant mediastinal or hilar adenopathy.
Vascular and cardiac structures are normal.
Atherosclerosis of the thoracic aorta and coronary arteries.
Included abdomen is unremarkable.
Bony structures are unremarkable.

IMPRESSION:
  1. LungRads Category x . See below for recommendations.
  2. x pulmonary emphysema in the lung parenchyma.
3. Atherosclerosis of the thoracic aorta and coronary arteries.

ANOTHER VERSION:

FINDINGS: Evaluation of the soft tissues is limited with low dose CT technique.

LUNG NODULES:

Node#1: [ ]mm [location] [central/peri/subpleural/juxtapleural] [smooth/lobulated/irregular solid/partisolid/GG] nodule [without/central/complete/popcorn/concentric/eccentric] calcification on image#[].

Node#2: [ ]mm [location] [central/peri/subpleural/juxtapleural] [smooth/lobulated/irregular solid/partisolid/GG] nodule [without/central/complete/popcorn/concentric/eccentric] calcification on image#[].

MISCELLANEOUS: []

IMPRESSION: LungRads category[]. See below for recommendations.

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CT CHEST SCREEN RECC

RECOMMENDATIONS:

LungRads Category 1:

- No nodules
- Nodules with specific calcifications: complete, central, popcorn, concentric rings
- Nodules containing fat

Management: continue annual screening

LungRads Category 2:

- Solid nodule <6mm
- New nodule <4mm
- Part solid nodule <6mm
- Ground glass nodule <20mm
- Ground glass nodule >20mm, unchanged or slowly growing
- Cat 3 or 4 nodule unchanged for >3 months
Management: continue annual screening

LungRads Category 3:

- Solid nodule 6-8mm or new 4-6mm
- Part solid nodule >6mm or new <6mm
- Nonsolid nodule ≥20mm

Management: 6 month f/u CT, if no change, return to annual screening

LungRads Category 4A:

- Solid nodule: 8-15mm or growing <8mm or new 6-8mm
- Part solid nodule: >6mm with solid component 6-8mm or any new/growing <4mm solid component
- Endobronchial nodule

Management: Pulmonary Dr. Advice

LungRads Category 4B:

- Solid nodule ≥15mm or new/growing ≥8mm
- Part solid nodule with ≥8mm solid component or new/growing ≥4mm component

Management: Pulmonary Dr. Advice

LungRads Category 4X:

- Category 3 or 4 nodules with additional features or imaging findings that increases the suspicion of malignancy

Management: Pulmonary Dr. Advice

REFERENCE: LUNG-RADS CATEGORIES

Category 0= incomplete (additional imaging needed or comparison to prior CT needed)
Category 1= negative (no nodules or definitely benign nodules)--continue annual low dose CT screening
Category 2= benign appearance or behavior; very low likelihood of becoming clinically active cancer due to small size or lack of growth (follow-up low dose CT in 1yr)
Category 3= probably benign (follow-up low dose CT in 6mo)
Category 4A= suspicious with 5-15% likelihood of malignancy (follow up low dose CT in 3mo or PET/CT for solid nodule 8mm or larger)
Category 4B= suspicious with >15% likelihood of malignancy (consider multidisciplinary approach for next step which may include full dose CT chest with IV contrast vs PET/CT and/or tissue sampling)
Category 4X= suspicious with additional features/findings which further increase likelihood of malignancy (consider multidisciplinary approach for next step which may include full dose CT chest with IV contrast vs PET/CT and/or tissue sampling)

Modifier S= clinically significant non-lung cancer findings (which may require additional imaging/workup)
Modifier C= prior diagnosis of lung cancer

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CT HEAD NORMAL

FINDINGS: Cerebral sulci, basal cisterns, and ventricles are normal for patient's age. No acute bleed or transcortical infarct. No mass effect or midline shift. No depressed skull fracture.

IMPRESSION: Normal non-contrast CT head.

------------------------

CT HEAD OLD

FINDINGS: Mild cerebral volume loss with ventricular prominence commensurate with age. Mild subcortical, periventricular, and deep white matter hypodensities, non-specific, likely small vessel ischemic changes. No acute infarct or intracranial hemorrhage. No mass effect or midline shift. No destructive calvarial lesion.

IMPRESSION: No acute intracranial findings.

------------------------

CT RUNOFF TECHNIQUE

Axial CT scan of abdomen/pelvis along with bilateral lower extremity runoff to feet with cc Omnipaque-350 IV. Images were transferred to the GE Advantage 4.4 workstation and multiplanar volume reconstruction and maximum intensity projection reconstructions were also performed.

------------------------

CT SINUS
FINDINGS:

FINDINGS: Paranasal sinuses are well-aerated and pneumatized without significant mucoperiosteal thickening or air-fluid level. Bilateral ostiomeatal complexes are patent. Nasal septum is midline. Nasal passages are patent. Nasopharynx appears unremarkable. Orbits and surrounding soft tissues are within normal limits.

There are soft tissue densities narrowing or at least obstructing nasal passages at the level of middle/inferior turbinates suggestive of nasal polyps. There is moderate paranasal sinus disease worst within [sinuses] with complete/near-complete opacification. Hyperdense and partially-calcified sinus content suggest chronic sinusitis. There is relatively less involvement or sparing of [sinus] with only minimal/mild mucoperiosteal thickening. No air-fluid level within sinuses to suggest acute sinusitis. Nasal septal is midline. Visualized mastoid air cells are unopacified. Orbits and nasopharynx are unremarkable. Paranasal sinuses: The paranasal sinuses are unremarkable.

Osteomeatal units: The osteomeatal units are patent.

Olfactory grooves: The olfactory grooves are patent.

Nasal septum: The nasal septum is midline.

Turbinates: The middle and inferior turbinates are normal.

Orbits/surrounding soft tissues: The orbits and soft tissues surrounding the skull are unremarkable.

Brain: The visualized brain is unremarkable.

IMPRESSION:

1.
2.
3.

CT TRAUMA

CT HEAD

Findings: No acute bleed or displaced skull fracture. No scalp hematoma. No mass effect or midline shift. Ventricles and basal cisterns are normal.

IMPRESSION: No acute intracranial findings.
CT C-SPINE
FINDINGS: Vertebral body height and alignment is normal. No acute fracture or listhesis. Prevertebral soft tissues are normal. Disk height is maintained without significant DJD.

IMPRESSION: No acute osseous injury.

CT CHEST
FINDINGS: Lungs are clear without pneumothorax or contusion. No mediastinal hemorrhage. No acute aortic injury. No displaced rib fracture. Visualized portions of upper abdomen are normal.

IMPRESSION: No acute intrathoracic findings.

CT ABD/PELV
FINDINGS: No solid or hollow viscus injury. No free air or free fluid. No vascular injury. No pelvis or spinal fracture.

IMPRESSION: No acute intrathoracic findings.

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CTA HEAD NECK

TECHNIQUE: Noncontrast CT head followed by Contrast-enhanced CT angiography of head/neck (from vertex of skull through aortic arch) with 90 ml of Omnipaque 350 IV. MIP and multiplanar volume reconstruction and postprocessing was performed on GE Advantage 4.4 workstation.

FINDINGS: Bilateral carotid and vertebral arteries are patent without significant stenosis or dissection. Anterior and posterior intracranial circulation and circle of Willis is intact without aneurysm or occlusion.

No acute bleed or transcortical infarct. No enhancing intracranial mass. Ventricles and basal cisterns are normal. No midline shift or mass-effect. No depressed skull fracture.

Cervical spine alignment is normal without fracture or listhesis.

Airways are patent. Paranasal sinuses are well aerated and mastoid air cell are unopacified. No significant lymphadenopathy. Thyroid appears unremarkable. Lung apices are clear.

IMPRESSION: No acute findings to explain patient's symptoms.
---

**FLUORO Eso**

**TECHNIQUE:** Double contrast esophagram with pharyngeal evaluation.

**CONTRAST:** thin barium

**FLUORO TIME:** min

**FINDINGS:** Patient swallowed barium without difficulty or aspiration. Normal esophageal mucosa and motility without stricture or extrinsic compression. No hiatal hernia. No gastroesophageal reflux elicited despite Valsalva maneuvers. Pharyngeal evaluation is normal without diverticula or abnormal pooling of contrast. Normal transit of a 13 mm barium pill through esophagus into stomach without difficulty.

**IMPRESSION:** Normal double-contrast Esophagram.

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**FLUORO SBFT**

**COMPARISON:** None available

**TECHNIQUE:** Single-contrast Small Bowel Follow-Through fluoroscopic study.

**CONTRAST:** thin barium

**FLUORO TIME:** min

**FINDINGS:** Scout images demonstrate normal bowel gas pattern. Small bowel loops are normal in caliber and mucosal pattern without stricture or obstruction. Terminal ileum and ileocecal junction is visualized and is unremarkable. The transit time from stomach to cecum is Xhrs Ymin (normal 30min to 3hrs).

**IMPRESSION:** Normal small-bowel follow-through study.

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**FLUORO support**

**FLUORO TIME:** min
DESCRIPTION: Fluoroscopy support was provided for intra-operative procedure. Fluoroscopic spot images were submitted. Please see operative/procedure report for further details.

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FLUORO UGI

TECHNIQUE: Double-contrast Upper GI fluoroscopic evaluation.

CONTRAST: thin barium

FLUORO TIME: min

FINDINGS: Patient swallowed barium without difficulty or aspiration. Normal esophageal mucosa and motility without stricture or extrinsic compression. No hiatal hernia. No significant gastroesophageal reflux noted despite Valsalva maneuvers. Normal gastric mucosa and duodenal bulb. Pharyngeal evaluation is normal without diverticula or abnormal pooling of contrast.

IMPRESSION: Normal double-contrast Upper GI study.

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FLUORO UGI PEDS

TECHNIQUE: Double-contrast Upper GI fluoroscopic evaluation.

CONTRAST: Diluted water-soluble contrast via bottle

FLUORO TIME: min

FINDINGS: 4oz of diluted water-soluble contrast was administered via bottle. Stomach is normal in position. Pylorus is unremarkable. Contrast empties promptly into duodenum. No obstruction of the duodenum. Ligament of Treitz or duodenal-jejunal junction lies in normal/abnormal/low position. Incidental note of gastroesophageal reflux during exam.

IMPRESSION: Normal upper GI study without evidence for pyloric stenosis or malrotation.

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FLUORO UGI postop
**COMPARISON:** None available.

**TECHNIQUE:**

**CONTRAST:**

**FLUORO TIME:** min

**FINDINGS:** Patient is status post . Scout images shows post-surgical changes. Patient swallowed water-soluble contrast without difficulty. No evidence for contrast extravasation to suggest leak. Contrast transits across GE junction, into normal-appearing gastric pouch, and across the gastroenteric anastomosis without delay. There no is significant narrowing at the anastomotic site. No gastroesophageal reflux noted. Entero-enteric anastamosis was not evaluated on this exam.

**IMPRESSION:** Expected post-operative changes with no evidence for leak or other complications.

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**FLUORO VCUG**

**COMPARISON:**

**TECHNIQUE:** Using sterile technique, the bladder was catheterized and a preliminary spot image of the abdomen was obtained. Sterile Cysto-Conray contrast was then introduced into the urinary bladder under intermittent pulsed fluoroscopy and spot images were obtained in various projections.

**CONTRAST:** cc Cysto Conray

**FINDINGS:** The preliminary scout image demonstrates an unremarkable bowel gas pattern.

The urinary bladder was normal in size and contour. No vesicoureteral reflux was seen during the course of the exam. Voiding views revealed a grossly normal appearance of the urethra. Postvoid image shows satisfactory emptying of the urinary bladder, with no vesicoureteral reflux.

**IMPRESSION:** Normal VCUG study. No vesicoureteral reflux noted during this examination.

----------------------------------------------
**TECHNIQUE:** Double/Single-contrast Barium Enema.

**FLUORO TIME:** min

**FINDINGS:** Scout film demonstrates appropriate bowel prep and unremarkable bowel gas pattern. Air and barium was introduced retrograde via a rectal tube after digital rectal exam. Fluoroscopic spot images were obtained. The colon is visualized in its entirety. The colonic mucosa and haustral pattern is normal. No focal narrowing/constricting lesion or polyps are noted. Reflux is seen into a normal appearing terminal ileum. The appendix is visualized. Excess barium was drained out at the end of the exam and the rectal tube was removed. Postevacuation images of the rectum is normal. Patient tolerated procedure well.

**IMPRESSION:** Normal single/double-contrast barium enema study.

------------------------

**MRI orbits**

**FINDINGS:** Optic nerves and optic chiasm are normal in size, signal intensity and enhancement. Globes are intact. Extra-ocular muscles and retrobulbar fat are normal. The cavernous sinus appears unremarkable.

**IMPRESSION:** Normal MRI orbits.

------------------------

**MRA head neck**

**TECHNIQUE:** Standard MRI brain along with noncontrast MRA head/neck (2D/3D TOF). No IV gadolinium given.

**FINDINGS:**

**MRI Brain:** No acute infarct or hemorrhage. No mass effect or midline shift. Ventricles are normal. No destructive calvarial lesion.

**MRA Head:** Normal flow-related enhancement is identified within intracranial anterior and posterior circulation. Conventional anatomy. No hemodynamically significant stenosis or occlusion. No aneurysm identified.

**MRA Neck:** The right common, internal, and external carotid arteries are patent. The left common, internal, and external carotid arteries are patent. The cervical segments of the right and left vertebral arteries appear normal. No hemodynamically-significant stenosis or occlusion.
IMPRESSION:
1. No acute intracranial findings.
2. Normal MRA head/neck without Gadolinium.
3.

-------------------

MRCP

TECHNIQUE: MRCP was performed with thin/thick slab MIPs along with axial/coronal T2 SSFSE sequences. No IV Gadolinium was given.

FINDINGS: The common bile duct measures mm in largest dimension and tapers normally distally. No intra-/extra-hepatic ductal dilation. Pancreatic duct measures mm. No filing defect within common bile duct. No cholelithiasis or gallbladder wall thickening. No focal hepatic or pancreatic lesion seen without benefit of IV gadolinium.

IMPRESSION:
1. 
2. 
3. 

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MRI ankle

FINDINGS:

Tendons: Flexor/extensor and Peroneal tendons are normal. Achilles' tendon is unremarkable.

Ligaments: Medial/lateral and high ankle ligaments are intact.

Bones/cartilage: Talar dome is intact. No acute fracture or bone marrow edema. No significant joint effusion.

Miscellaneous: Sinus tarsi and tarsal tunnel are normal.

IMPRESSION:
1. 
2. 
3. 

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MRI brain normal
FINDINGS:
For the patient's stated age, cerebral sulci, basal cisterns and ventricles are normal.
No mass, mass effect or midline shift.
No restricted diffusion to suggest acute infarct.
No extra-axial fluid collection/hemorrhage.
GRE sequence is normal without susceptibility artifact.
Major intracranial arterial and dural venous sinus flow voids are patent.
Paranasal sinuses, orbits, and temporal bones are normal.
No suspicious calvarial lesion.

IMPRESSION:
1. 
2. 

------------------------

MRI brain old

FINDINGS:
Mild atrophy of brain parenchyma with compensatory enlargement of the CSF containing spaces.
Confluent/scattered/patchy T2 and FLAIR hyperintense foci within subcortical, periventricular, and deep white matter, non-specific, likely secondary to microvascular ischemic or post-infectious/post-inflammatory changes.

No restricted diffusion to suggest acute infarct.
No extra-axial fluid collection/hemorrhage.
No mass, mass effect or midline shift.

Major intracranial arterial and dural venous sinus flow voids are patent.
Paranasal sinuses, orbits, and temporal bones are normal.
No destructive calvarial lesion.

Satisfactory flow-voids are seen within distal vertebral, basilar, and internal carotid arteries continuing into circle of Willis and proximal cerebral arteries.
Satisfactory flow-voids within great draining dural venous sinuses.

IMPRESSION:
1. 
2. 
3. 

------------------------
**MRI C-spine**

Alignment, disk height, and marrow signal is maintained. Cerebellar tonsils are normal in location. Prevertebral soft tissues are normal. No cord compression or abnormal cord signal. Atlantoaxial articulation is normal.

mild/mod/sig disk space narrowing with endplates spondylosis

Uncovertebral hypertrophy

mild/mod/sig diffuse/central/paracentral disk-osteophyte complex or disk protrusion

Abuts/effaces the ventral thecal sac

Results in mild/mod/sig central canal stenosis (with residual AP diameter of x mm) and left/right/bilat mild/mod/sig neuroforaminal narrowing

No cord compression or abnormal cord signal (compressive myelopathy/edema/myelomalacia/tumor/demyelination/ transverse myelitis)

Abuts ventral cord; displaces cord; indents/flattens ventral cord; compresses/deforms cord

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**MRI hips**

**TECHNIQUE:** Multiplanar, multisequence MRI imaging of hips without Gadolinium.

**FINDINGS:**

**Muscle/Tendons:**

**Bones:**

**Labrum/cartilage:**

**Miscellaneous:**

There is no bone marrow edema or acute fracture. No significant hip degenerative changes. No significant joint effusion or paralabral cyst. No tendonitis or bursitis. No intramuscular edema or strain. Visualized pelvis is within normal limits.

**IMPRESSION:**
MRI IACs

FINDINGS:

The brain has normal volume and shows no mass effect. No retrocochlear mass lesion is seen. The cerebellopontine angle cisterns are clear. No abnormal enhancement or nodularity is identified along the seventh and eighth cranial nerve complexes. The ventricles are nondilated. Major intracranial flow voids appear intact.

No mass or abnormal enhancement is seen in the cerebellopontine angle cisterns or internal auditory canals to suggest the presence of a vestibular schwannoma or other lesion. The course of the 7-8th cranial nerve complex has a normal appearance on high-resolution T2-weighted images (CISS/FIESTA) bilaterally.

IMPRESSION:
No evidence of vestibular schwannoma or other IAC abnormality.

MRI knee

FINDINGS:

Menisci: Medial and lateral menisci are intact.

Ligaments: ACL, PCL, MCL, and LCL are intact.

Tendons: Extensor tendon mechanism is normal. Popliteal tendon is intact.

Bone/cartilage: No significant DJD or chondromalacia. No bone marrow edema.

Misc: No joint effusion. No Baker's cyst.

IMPRESSION:
1. 
2. 
3. 

MRI L-spine
Alignment, disk height, and marrow signal is maintained. Conus medullaris terminates at appropriate level. Thecal sac and contents are normal. No pars defect. No significant disk bulge/herniation, neuroforaminal narrowing, or central canal stenosis.

Disk desiccation.

mild/mod/sig disk space narrowing or disk height loss with endplate spondylosis (or degenerative endplate changes).

Central/paracentral/lateral/far-lateral

Diffuse disk bulge vs broad-based herniation vs focal herniation (protrusion or extrusion +/- migration or sequestered free fragment)

Lig flavum hypertrophy

Facet arthropathy/arthropathy

Abuts/flattens vs effaces/displaces ventral thecal sac

Abuts/effaces lateral recess resulting in originating nerve root impingement/compression

Results in mild/mod/sig neuroforaminal narrowing with exiting nerve root impingement/compression (but nerve root exits freely)

mild/mod/sig central canal stenosis.

Cauda-equina syndrome.

Tarlov cysts.

-----------------------

MRI pelvis

FINDINGS:

**Uterus:** The uterus is heterogenous enlarged, measuring [ ] x [ ] x [ ] cm. The endometrial stripe is homogenous measuring [ ] mm. The junctional zone measures [ ] mm. No focal fibroid.

The uterus is heterogeneously enlarged, measuring [ ] x [ ] x [ ] cm with numerous T1 isointense and predominantly T2 hypointense fibroids with mostly heterogeneous post-gadolinium enhancement. Majority of these fibroids are intramural or subserosal in location with largest of these fibroid measuring [ ] x [ ] x [ ] cm.
No subserosal or submucosal fibroids.

There is a [ ] x [ ] x [ ] cm pedunculated/subserosal fibroid located within with stalk measuring >2cm.

The endometrial stripe is distorted but not thickened.

The junctional zone is grossly within normal limits.

**Adnexa:** The left ovary appears within normal limits. The right ovary appears within normal limits.

**Cervix/Vagina:** Unremarkable.

**Peritoneum:** Physiologic free fluid in the cul-de-sac.

**Lymph Nodes:** No significant lymphadenopathy by size criteria.

**Bladder:** The urinary bladder is unremarkable.

**Bones:** Limited evaluation of the lumbo-sacral spine is within normal limits.

**IMPRESSION:**
1.
2.
3.

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**MRI sella**

**FINDINGS:** The pituitary gland enhances homogeneously. The infundibulum is midline. The suprasellar cistern and optic chiasm appear unremarkable. The cavernous sinuses enhance symmetrically. The cavernous carotid flow voids are intact. The remainder of the brain, as seen on the sagittal T1-weighted and coronal T2-weighted sequences, appears unremarkable.

**IMPRESSION:** No significant abnormality.

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**MRI shoulder**

**FINDINGS:**
AC joint: No significant AC arthrosis.

Rotator cuff: No rotator cuff tear or tendinopathy. No bursitis.

Long head of the biceps: Intact.

Labrum: This exam is not tailored for detailed labral evaluation without arthrogram. Labrum appears grossly intact with no paralabral cyst.

Bone/cartilage: No significant DJD or bone marrow edema.

Misc: No joint effusion.

**IMPRESSION:**
1. 
2. 
3. 

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**MRI CTL spine**

**FINDINGS:**

**C-SPINE:** Alignment is normal. No marrow lesion. Posterior fossa is unremarkable. No abnormal cord signal.

C2-3: Unremarkable.
C3-4: Unremarkable.
C4-5: Unremarkable.
C5-6: Unremarkable.
C6-7: Unremarkable.
C7-T1: Unremarkable.

**T-SPINE:** Alignment is normal. No marrow lesion. No abnormal cord signal.

**L-SPINE:** Alignment is normal. No marrow lesion. Conus medullaris terminates at appropriate level.

T12-L1: Unremarkable.
L1-2: Unremarkable.
L2-3: Unremarkable.
L3-4: Unremarkable.
L4-5: Unremarkable.
L5-S1: Unremarkable.

Incidental note of  .

**IMPRESSION:**
1. 
2. 
3. 

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**MRI TMJ**

**FINDINGS:**

Right TMJ: There are no significant degenerative changes. The disk is intact and appears normal on both the closed and open mouth views. There is normal anterior excursion of the mandibular condyle in relation to the temporal eminence on the closed versus open mouth views.

Left TMJ: There are no significant degenerative changes. The disk is intact and appears normal on both the closed and open mouth views. There is normal anterior excursion of the mandibular condyle in relation to the temporal eminence on the closed versus open mouth views.

**IMPRESSION:**
1. 
2. 

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**MRI wrist**

**FINDINGS:**

Ligaments: Scapholunate and lunotriquetral ligaments are intact. Extrinsic ligaments are unremarkable.

TFCC: TFCC is intact.

Bone/cartilage: No bone marrow edema or acute fracture. Carpal alignment is normal. Distal radioulnar joint is intact.

Tendon: No tendinopathy or tenosynovitis.
Miscellaneous: No significant joint effusion. No ganglion cyst. Carpal tunnel is grossly unremarkable.

**IMPRESSION:**
1. 
2. 
3. 

------------------------

**NM WBBS**

**COMPARISON:** No previous study available for comparison.

**RADIOPHARMACEUTICALS:** [ ]mCi of Tc-MDP was injected I.V.

**TECHNIQUE:** 3-4hrs after radiotracer injection, whole body bone scan was performed with selected spot view.

**FINDINGS:** [ ]. There is degenerative-type uptake within [ ]. Physiologic uptake within kidneys and bladder.

**IMPRESSION:** No bone scan evidence for osteoblastic metastasis.

Stable abnormal bone scan unchanged from prior study. No new lesions or evidence for progression.

------------------------

**NM BS 2phase**

**COMPARISON:** No previous study available for comparison.

**RADIOPHARMACEUTICALS:** [ ]mCi of Tc-MDP was injected I.V.

**TECHNIQUE:** 2-phase whole body bone scan. Whole body blood pool imaging was performed followed by 3-4hrs delayed whole body imaging with selected spot views.

**FINDINGS:** [ ]. No abnormal periarticular uptake on either blood pool or delayed whole body imaging. Physiologic uptake within kidneys and bladder.

**IMPRESSION:** No bone scan evidence for synovitis or active inflammatory arthritis.
NM BS 3phase

COMPARISON: No previous study available for comparison.

RADIOPHARMACEUTICALS: [ ]mCi of Tc-MDP was injected I.V.

TECHNIQUE: 3 phase bone scan was performed of [].

FINDINGS: [].

There is mild/moderate abnormal focal/non-focal/diffuse peri-articular uptake on all 3 phases of bone scan within left/right wrist/feet which is asymmetric compared to opposite side consistent with CRPS.

Patient has left/right hip/knee arthroplasty in place. There is mild/moderate intensity focal/non-focal/diffuse periprosthetic uptake along site on flow/blood pool/delayed imaging. On delayed imaging there is degenerative vs post-traumatic uptake within site.

IMPRESSION: [].

---------------------------

NM WBBS METS FU

CLINICAL HISTORY: []

COMPARISON: Bone scan []

RADIOPHARMACEUTICALS: [ ]mCi of Tc-MDP was injected I.V.

TECHNIQUE: 3-4hrs after radiotracer injection, whole body bone scan was performed with selected spot view.

FINDINGS: Patient has known widespread metastatic disease. In comparison to the prior exam, there is interval no significant change in overall number and intensity of lesions within axial and proximal appendicular skeleton.

Development of 2 new lesions within appendicular skeleton (left femoral neck and mid femoral
diaphysis).

Remainder of numerous axial skeletal lesions (including ribs, spine, and pelvis) appear to be stable/slightly improved/slightly worsened.

**IMPRESSION:** Known widespread osseous metastasis with no significant interval change.

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**NM DAT SCAN**

**COMPARISON:** []

**RADIOPHARMACEUTICAL:** []mCi I-123 Ioflupane (DaT scan) I.V.

**TECHNIQUE:** 100mg SSKI (0.1cc) was given PO (in water) 1 hour prior to radiotracer injection for thyroid blockade. Brain SPECT imaging was performed approximately 4hrs after radiotracer injection using a head holder and high resolution collimator.

**FINDINGS:**

There is normal symmetric bilateral caudate head and putamen uptake.

There is mild/moderate/significant unilateral/bilateral decreased/diminished uptake within left/right putamen with sparing of bilateral caudate heads.

**IMPRESSION:**

Abnormal DaT scan with presynaptic striatal dopaminergic deficit involving [] suggestive of Parkinsonian syndrome rather than essential/psychogenic/drug-induced tremor. Abnormal DAT scan can also be seen in setting of Lewy body dementia.

Normal DaT scan without presynaptic striatal dopaminergic deficit.

Abnormal DaT scan but without findings typical of Parkinsonian syndrome. Etiologies other than Parkinsonian syndrome should be considered.

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**NM DEXA**
CLINICAL HISTORY: []

TECHNIQUE: DXA scan was performed on GE Lunar Prodigy Advance.

DXA RESULTS:

Lowest T-score: -[] from []
Lowest Z-score: -[] from []

FRAX 10-year probability of hip fracture is [[]]% and for other major osteoporotic fracture is [[]]%.

Compared to prior DEXA: []
%change: []
%change: []
%change: []

W.H.O. CRITERIA (REFERENCE):
Normal = T-score of -1.0 or higher
Low bone mass (Osteopenia) = T-score between -1.0 and -2.4
Osteoporosis = T-score -2.5 or lower

GENERAL TREATMENT RECOMMENDATION:
For all patients, consider Calcium 1,200 mg/daily and Vitamin D 1,000 IU/daily, along with recommend weight-bearing and muscle-building exercise and counsel to quit smoking.

If lowest T-scores is less than or equal to -2.5; OR FRAX Hip fracture risk of 3% or more; OR FRAX Major osteoporotic fracture risk >20% or more, first line treatment recommendation is Alendronate 70mg once weekly (Risedronate 35mg once weekly if Alendronate is not tolerated or contraindicated). Also, check serum calcium, creatinine, and vitamin D 25-hydroxy. See Clinical Practice Guidelines for Osteoporosis Management for treatment of vitamin D deficiency.

If lowest Z-score is less than -2.0, or if fracture occurs while on treatment, work up for secondary causes and consider referral to Endocrinology/Rheumatology. Suggested labs prior to referral: SPEP; TSH; AM testosterone (men); ALT; creatinine; albumin; alkaline phosphatase; vitamin D 25-hydroxy; 24 hr urine for calcium/creatinine; parathyroid hormone; serum calcium.

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NM DEXA ADDENDUM
ADDENDUM TO DEXA REPORT:

Self reported risk factors: []

Lowest T-score: -[] from []
Lowest Z-score: -[] from []

FRAX 10-year probability of hip fracture is []% and for other major osteoporotic fracture is []%.

Compared to prior DEXA:
%change: []
%change: []
%change: []

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NM GALLIUM

COMPARISON: []

RADIOPHARMACEUTICAL: []mCi Gallium-67 citrate I.V. on []

TECHNIQUE: Whole body infection/inflammation imaging with Gallium was performed 24/48hrs after injection along with selected spot views.

FINDINGS: []. There is physiologic uptake within liver, spleen, bowel, and bone/bone marrow.

IMPRESSION: []

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NM GE Ensure/Boost

COMPARISON: []

RADIOPHARMACEUTICAL: []uCi of Tc-sulfur colloid P.O. in 4oz Ensure/Boost

TECHNIQUE: Modified 4hr gastric emptying study. In lieu of standardized solid egg meal, radiolabeled 4oz Ensure/Boost (250kcal similar to egg meal) was given followed by anterior or LAO static imaging over the abdomen performed at 1hr, 2hr, and 4hr.
**FINDINGS:** Modified 4hr gastric emptying study with radiolabeled Ensure/Boost (instead of standardized egg meal). The gastric retention measures [\%] at 1hr, [\%] at 2hr, and [\%] at 4hr.

**IMPRESSION:** Normal modified 4hr gastric emptying study with radiolabeled Ensure/Boost (with kcal similar to standardized solid egg meal).

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**NM GE LIQUID**

**COMPARISON:** No similar past studies are available for comparison.

**RADIOPHARMACEUTICAL:** [\muCi of Tc-sulfur colloid P.O. in 300cc of water]

**TECHNIQUE:** Liquid gastric emptying study. 60min of dynamic imaging over abdomen in anterior or LAO position.

**FINDINGS:** Time to half max (T1/2) gastric activity is approximately [\min] (normal less than 23min).

**IMPRESSION:** Normal liquid gastric emptying study.

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**NM GE OATMEAL**

**COMPARISON:** No similar past studies are available for comparison.

**RADIOPHARMACEUTICAL:** 300uCi of Tc-sulfur colloid P.O. in oatmeal (semi-solid meal). Patient is unable/unwilling to consume standard egg meal.

**TECHNIQUE:** 90min of dynamic imaging over abdomen in anterior or LAO position.

**FINDINGS:** Time to half max (T1/2) gastric activity is approximately [\min] (normal less than equal to 50min).

**IMPRESSION:** Normal semi-solid gastric emptying study.

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**NM GE SOLID 4HR**

**COMPARISON:** No similar past studies are available for comparison.

**RADIOPHARMACEUTICAL:** \(\left[\right]\)uCi of Tc-sulfur colloid P.O. in cooked eggs (standardized solid meal)

**TECHNIQUE:** 4hr solid gastric emptying study. After ingestion of radiolabeled standardized solid meal, anterior or LAO static imaging over the abdomen generally performed at 0hr, 1hr, 2hr, and 4hr.

**FINDINGS:** The gastric retention measures \(\left[\right]\)% at 1hr (normal between 30-90%), \(\left[\right]\)% at 2hr (normal 60% or less), and \(\left[\right]\)% at 4hr (normal <10%). Based on these results, 4hr delayed imaging was not acquired.

**IMPRESSION:** Normal solid gastric emptying study./Delayed solid gastric emptying./No gastroparesis./Findings suggestive of rapid/accelerated emptying--correlate clinically.

Mild (11-20%), moderate (21-35%), and significant (36-50%) gastroparesis.

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**NM GENERIC**

**COMPARISON:** []

**RADIOPHARMACEUTICAL:** []mCi Tc-[] I.V.

**TECHNIQUE:** []

**FINDINGS:** []

**IMPRESSION:**
1. []
2. []

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**NM GI BLEED**
COMPARISON: []

RADIOPHARMACEUTICAL: []mCi Tc-RBC (in-vitro labeling) I.V.

TECHNIQUE: 60-90min anterior dynamic imaging of abdomen/pelvis was performed after radiotracer injection.

FINDINGS: No abnormal focus of radiotracer activity was noted during the entire length of study. There is physiologic uptake within blood pool, spleen, kidneys and bladder. There is focal abnormal activity that appears in expected region of [], intensifies over time, and transits intraluminally in antegrade/retrograde fashion.

IMPRESSION: No scintigraphic evidence for active GI bleed./Active [] GI bleed within [] distribution.

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NM HEMANGIOMA

COMPARISON: []

RADIOPHARMACEUTICAL: []mCi Tc-RBC I.V.

TECHNIQUE: Flow, blood pool, and 2-3hr delayed planar imaging of the abdomen was performed followed by delayed SPECT imaging.

FINDINGS: Hepatic lesion of interest is relatively photopenic on flow and blood pool imaging with diffuse increased uptake (greater than hepatic background and equal to blood pool activity) on delayed imaging best evaluated on SPECT imaging consistent with hemangioma.

IMPRESSION: []

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NM HIDA

COMPARISON: No previous study available.

RADIOPHARMACEUTICALS: []mCi Tc-choletec IV
**TECHNIQUE:** 60min anterior dynamic imaging over the abdomen was performed after radiotracer injection. Additional 4hr delayed static imaging was obtained. Patient was pretreated with []mcg CCK IV 30 minutes before radiotracer injection given prolonged fasting state.

**FINDINGS:** Normal hepatic uptake and excretion with appropriate clearance of background blood pool activity. Normal visualization of biliary, gallbladder and bowel activity.

Normal hepatic uptake with decreased excretion and poor clearance of background blood pool activity suggestive of hepatocellular dysfunction.

Normal visualization of biliary and bowel activity. However, no gallbladder activity on initial or 4hr delayed imaging.

Normal hepatic uptake and excretion with appropriate clearance of background blood pool activity. Normal visualization of biliary and bowel activity within 60min. There is delayed visualization of gallbladder activity at 4hr consistent with chronic cholecystitis.

Delayed biliary-to-bowel transit is non-specific but can be seen with chronic cholecystitis.

Incidental note of intermittent enterogastric reflux.

Distended common bile duct with poor clearance of biliary activity suggestive of partial/high-grade biliary obstruction.

**IMPRESSION:** No scintigraphic evidence for acute cholecystitis. Cannot exclude chronic cholecystitis.

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**NM HIDA +CCK**

**COMPARISON:** No previous study available.

**RADIOPHARMACEUTICALS:** []mCi Tc-cholectec IV

**ANCILLARY PHARMACEUTICAL:** []mcg CCK IV infusion over 30min

**TECHNIQUE:** 60min anterior dynamic imaging followed by GB ejection fraction determination using CCK infusion over 30min
**FINDINGS:** Normal hepatic uptake and excretion with appropriate clearance of background blood pool activity. Normal visualization of biliary, gallbladder, and small bowel activity.

After CCK infusion, gallbladder ejection fraction is calculated to be [%] (normal greater than 35%). Patient was asymptomatic during CCK infusion./Patient had abdominal discomfort during CCK infusion.

**IMPRESSION:** Depressed gallbladder ejection fraction consistent with chronic cholecystitis or gallbladder dyskinesia.

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**NM HIDA +Ensure**

**COMPARISON:** No previous study available.

**RADIOPHARMACEUTICALS:** []mCi Tc-cholectec IV

**TECHNIQUE:** 60min dynamic imaging followed by GB ejection fraction determination using 8oz Ensure/Boost P.O. (instead of intravenous CCK)

**FINDINGS:** Normal hepatic uptake and excretion with appropriate clearance of background blood pool activity. Normal visualization of biliary, gallbladder, and small bowel activity.

60min after oral Ensure/Boost (in lieu of CCK) administration, gallbladder ejection fraction is calculated to be [%] (normal greater than or equal to 33%).

**IMPRESSION:** Depressed gallbladder ejection fraction consistent with chronic cholecystitis or gallbladder dyskinesia./Normal hepatobiliary scan and gallbladder ejection fraction without evidence for acute/chronic cholecystitis.

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**NM I131 CA THERAPY INPT**

**COMPARISON:** []

**ADDITIONAL HISTORY:** []

**RADIOPHARMACEUTICALS:** []mCi l-131 P.O. inpatient therapy for thyroid cancer ablation.
**TECHNIQUE:** Dose was prescribed by an Authorized user in conjunction with treatment request by endocrinologist/ENT physician. The risks, benefits, and potential complications of radioactive I-131 therapy were discussed in detail with the patient. Verbal and written informed consent was obtained. Urine B-hCG was confirmed negative prior to therapy. Dose was verified in dose calibrator and patient was given oral I-131 pill under my direct supervision. Patient will be kept in hospital for next few days under supervised isolation for radiation safety precautions and subsequently, discharged to home per release criteria. Take-home written instructions sheet will be given at discharge for radiation safety precautions to be observed as an outpatient. Patient has been specifically advised to avoid close contact with children, pregnant women, and other members for public at time of discharge.

Also, patient has been advised to use appropriate contraceptive method to avoid pregnancy for 6 to 12 months following therapy.

**IMPRESSION:** Inpatient []mCi I-131 P.O. therapy for thyroid cancer ablation.

**UPDATE:** Patient was kept in hospital for []days in supervised isolation for radiation safety precautions. Inpatient stay was uneventful. Patient was discharged on [] in stable condition to home per release criteria (exposure rate of []mR/hr at 1m) and was given a take-home written instructions sheet for radiation safety precautions to be observed for another [3]days as an outpatient. Patient has been instructed to return in 7-10 days for post-ablation whole body scan.

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**NM I131 CA THERAPY OUTPT**

**COMPARISON:** []

**ADDITIONAL HISTORY:** []

**RADIOPHARMACEUTICALS:** []mCi I-131 P.O. outpatient therapy for thyroid cancer.

**TECHNIQUE:** Dose was prescribed by an Authorized user in conjunction with treatment request by endocrinologist/ENT physician. Suitability for outpatient therapy was determined during in-office consultation on [] and patient release calculations were performed using patient-specific factors to ensure potential dose to public of less than 0.5rem. The risks, benefits, and potential complications of radioactive I-131 therapy were discussed in detail with the patient. Verbal and written informed consent was obtained and take-home written instructions were given for radiation safety precautions to be observed for [5]days as an outpatient. Patient was
specifically advised to avoid close contact with children, pregnant women, and other members of public. Also, patient has been advised to use appropriate contraceptive method to avoid pregnancy for 6 to 12 months following therapy. Urine B-hCG was confirmed negative prior to therapy. Dose was verified in dose calibrator and patient was given oral I-131 pill under my direct supervision. No immediate complications.

**IMPRESSION:**
1. Outpatient [ ]mCi I-131 P.O. therapy for thyroid cancer.
2. Patient will return in 7-10 days for post-ablation scan.

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**NM I131 CONSULT**

**PRE I-131 THERAPY CONSULTATION**

**Relevant medical history:** [ ]year-old female with [ ]thyroid cancer status post total thyroidectomy on [ ]. No prior I-131 therapy or metascan. Patient denies urinary incontinence or renal disease. Patient is currently on low iodine diet and is currently off thyroid replacement therapy.

**Social history:** Patient lives [ ]. Patient will be able to sleep alone and have a bathroom for their own exclusive use. No pregnant female or children 18 years or younger at home. Patient does not work.

**Pertinent Imaging:** [ ]

**Pertinent Labs:**
TGag [ ], TGab [ ] and TSH [ ] on [ ].
Cr/GFR [ ] on [ ].
Hgb/Hct [ ] on [ ].

**Pregnancy/Breastfeeding:** Patient denies pregnancy or breastfeeding. Pregnancy test will be obtained prior to therapy.

**Discussion:** Pretherapy consultation with patient was done to determine suitability of I-131 cancer therapy in an outpatient setting. Patient's social situation was discussed in detail to determine whether patient would be able to follow strict radiation safety precautions at home following therapy without need for hospital stay. The radiation safety precautions were reviewed in detail and written documentation was provided for reference. Risks, benefits and potential complications of I-131 ablation were also explained and
patient had an opportunity to ask questions and have them answered.

30min was spent in consultation.

**PLAN:** Perform high-dose I-131 therapy as an outpatient. Patient understands and agrees to necessary radiation safety precautions related to outpatient therapy. Patient's social situation precludes outpatient therapy.

**Discussion:** Patient is here for routine I-131 surveillance metascan. Consultation with patient was done to answer questions and to determine suitability of outpatient treatment in case repeat I-131 cancer therapy is needed. Patient's social situation was discussed in detail and potential radiation safety requirements were discussed.

**PLAN:** Awaiting results of I-131 metascan. If needed, repeat I-131 therapy can be performed as an outpatient.

**Discussion:** Patient is here for routine I-131 surveillance metascan. No imaging evidence for recurrence. Patient's history was reviewed at time of dosing and subsequently imaging findings were discussed with patient in person on the day of the scan.

**PLAN:** No I-131 metascan findings to suggest recurrence. Patient to follow-up with Endocrinology.

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**NM I131 DOSIMETRY**

**RADIOPHARMACEUTICAL:** [ ]mCi I-123 P.O. on

**TECHNIQUE:** Patient-specific dosimetric evaluation was performed to determine max tolerated dose ensuring lung/WB delayed retention of less than 80/120mCi. Whole body imaging was performed at 2hrs (pre-void) and 24hrs (post-void) after radiotracer administration. Geometric mean of total anterior and posterior counts derived from ROI over whole body at 2hrs and over lungs/WB at 24hrs were utilized for determination of delayed lung/WB retention.

**FINDINGS:** [ ]. Total lung/WB retention was calculated to be [ ]% or [ ]mCi for 1mCi radioiodine.

**IMPRESSION:** Given lung/WB retention of [ ]% or [ ]per 1mCi of radioiodine, therapy with 200mCi I-131 is deemed to be safe in this patient with pulmonary metastasis or renal failure or
on dialysis.

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NM I131 THERAPY HYPERTHYROIDISM

ADDITIONAL HISTORY:

RADIOPHARMACEUTICALS: [mCi I-131 P.O. outpatient therapy for hyperthyroidism.

TECHNIQUE: Dose was prescribed by an Authorized user in conjunction with treatment request by endocrinologist/ENT physician. The risks, benefits, and potential complications of radioactive I-131 therapy were discussed in detail with the patient. Verbal and written informed consent was obtained and take-home written instructions were given for radiation safety precautions to be observed for 3 days as an outpatient. Patient was specifically advised to avoid close contact with children (including her 10-year-old son at home), pregnant women, and members of public. Also, patient has been advised to use appropriate contraceptive method to avoid pregnancy for 6 to 12 months following therapy. Urine B-hCG was confirmed negative prior to therapy. Dose was verified in dose calibrator and patient was given oral I-131 pill under my direct supervision. No immediate complications.

IMPRESSION: Outpatient [mCi I-131 P.O. therapy for hyperthyroidism.

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NM I131 METASCAN

RADIOPHARMACEUTICAL: [mCi I-131 P.O. on []

TECHNIQUE: Radioactive iodine was administered under supervision of an Authorized User. After 48-72hrs, whole body I-131 metascan was performed with spot views of the neck with and without markers. Negative pregnancy test was confirmed prior to dosing.

FINDINGS: No suspicious uptake within neck/chest. There is physiologic uptake within salivary glands, nasopharynx, stomach, colon and bladder.

IMPRESSION: No evidence for iodine-avid thyroid cancer recurrence. Please correlate with serum thyroglobulin levels.
**NM I131 POST-ABLATION SCAN**

**COMPARISON:**

**RADIOPHARMACEUTICAL:** [mCi I-131 P.O. radio-iodine ablation therapy as on].

**TECHNIQUE:** 7-10days post-ablation I-131 whole body scan with spot views of neck.

**FINDINGS:** Post-ablation scan shows expected uptake within the thyroid bed likely representing remnant thyroid tissue. No other areas of abnormal uptake. Normal/physiologic uptake within salivary glands, nasopharynx, stomach, colon and bladder.

**IMPRESSION:**
1. Expected uptake within thyroid bed most likely represents remnant thyroid tissue.
2. No regional lymph node uptake or distant metastatic disease.

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**NM INDIUM DUAL ISOTOPE**

**HISTORY:** []

**COMPARISON:** 3phase bone scan of bilateral knees

**RADIOPHARMACEUTICAL:** 0.5mCi Tc-WBC I.V. on [] and 10mCi Tc-SC I.V. on []

**TECHNIQUE:** Simultaneous dual-isotope imaging of bilateral knees with Indium labeled WBC (infection imaging) and Tc- Sulfur Colloid (marrow imaging). Post-processing normalization and subtraction was performed.

**FINDINGS:** There is no focal abnormal uptake on indium scan. There is concordant minimal/mild/moderate focal/non-focal/diffuse periprosthetic uptake on Indium and Sulfur Colloid scans suggestive of non-infectious etiology like redistributed or reactivated marrow.

There is minimal/mild/moderate focal/non-focal/diffuse periprosthetic uptake on Indium scan corresponding to region of concern on 3phase bone scan which is discordant with sulfur colloid scan.

**IMPRESSION:** No dual-isotope imaging findings to suggest hardware infection. Given abnormal 3 phase bone scan hardware loosening cannot be entirely excluded (correlate clinically). Dual
isotope imaging concerning for hardware infection.

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**NM INDIUM WB**

**COMPARISON:**

**RADIOPHARMACEUTICAL:** [mCi Indium labeled WBC I.V. on [ ]

**TECHNIQUE:** Whole body infection imaging with Indium-WBC was performed 24hrs after injection along with selected spot views.

**FINDINGS:** [ ]. There is physiologic uptake within spleen, liver, and bone marrow.

**IMPRESSION:** [ ]

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**NM INJ ONLY**

The patient was injected with [mCi Tc-[IV for nuclear medicine study. The study was subsequently canceled by inpatient team. No imaging was obtained. The exam code was changed to injection only.

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**NM LIVER SPLEEN**

**COMPARISON:** [ ]

**RADIOPHARMACEUTICAL:** [mCi Tc-Sulfur Colloid I.V.

**TECHNIQUE:** Planar imaging of liver/spleen was performed in multiple projections including SPECT imaging of abdomen

**FINDINGS:** No hepatosplenomegaly. No abnormal increased splenic uptake or evidence for colloid shift. Faint physiologic bone marrow uptake is noted.

**IMPRESSION:** No evidence for colloid shift or sequela of portal hypertension.
NM LYMPHO MELANOMA

RADIOPHARMACEUTICAL: 0.5mCi Tc-Lymphoseek in [2] equal doses

TECHNIQUE: Pre-operative sentinel node mapping for Melanoma. [2] peritumoral intradermal injections were performed at the [left/right] [] (at site of prior resection) followed by dynamic imaging for 1.5hrs. Time-out was done prior to procedure.

FINDINGS/IMPRESSION: Single sentinel lymph node(s) was identified within [] and overlying skin was marked to assist with intraoperative localization.

NM LYMPHO

PROCEDURE: Pre-operative [left/right] breast peri-areolar, intra-dermal injection of 0.5mCi Tc-Tilmanocept or Lymphoseek (divided into 2 equal doses) was performed for sentinel lymph node localization or lymphoscintigraphy. Time-out was done prior to procedure. No imaging was requested.

IMPRESSION: [] breast injected for sentinel lymph node localization.

NM LYMPHO LE

RADIOPHARMACEUTICAL: Total 1mCi Tc-Sulfur Colloid (divided in 2 equal doses) intradermal injections bilateral feet.

TECHNIQUE: Intradermal injection of radiotracer was performed at first and second web spaces of bilateral feet. Dynamic and static imaging of bilateral lower extremities was performed from feet to upper abdomen.

FINDINGS: There is high grade obstruction of right lower extremity deep lymphatic channel located distal to the ankle but proximal to the knee with resultant significant dermal backflow (superficial lymphatic channels) and poor transit above the knee. At 2hrs no significant radiotracer transit was seen above the knee.

Normal left lower extremity lymphatic imaging with visualization of inguinal nodes. On delayed
imaging, there is physiologic visualization of hepatic activity.

**IMPRESSION:**
1. Obstruction of right lower extremity deep lymphatics located proximal to the knee with resultant visualization/opacification of superficial lymphatic channels and poor transit distally. This correlates with history of lymphedema.
2. Normal left lower extremity lymphatics.

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**NM MECKELS**

**COMPARISON:** []

**RADIOPHARMACEUTICAL:** []mCi Tc-pertechnetate IV

**TECHNIQUE:** Patient was prepped with H2 blocker PO 2 days before and also 1 hour before exam. 60-90min dynamic imaging over the abdomen was performed with patient in anterior position followed by static post-void imaging in anterior and right lateral projections.

**FINDINGS:** No focal abnormal persistent activity within abdomen to suggest Meckel's diverticulum. There is physiologic gastric mucosal uptake (with subsequent spillage of gastric activity into proximal small bowel) along with renal and bladder activity.

**IMPRESSION:** No scintigraphic evidence for Meckel's diverticulum.

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**NM MPS 1day MIBI/MIBI**

**COMPARISON:** No previous study available for review.

**RADIOPHARMACEUTICALS:** []mCi Tc-Sestamibi IV at rest and []mCi Tc-Sestamibi IV at stress

**PROCEDURE:** 1-day Myocardial Perfusion Scan with Tc-Sestamibi. SPECT imaging was performed at rest followed by same day gated SPECT imaging after pharmacological stress with 0.4mg Lexiscan IV administered by Cardiology.

**FINDINGS:** []. No transient ischemic dilation (TID) at stress. Left ventricular ejection fraction is []% (normal 45% or above). Normal wall motion.
**IMPRESSION:**
1. No ischemia or infarct.
2. Ejection fraction of [ ]% with normal wall motion.

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**NM MPS 2day MIBI/MIBI**

**COMPARISON:** No previous study available for review.

**RADIOPHARMACEUTICALS:** [ ]mCi Tc-Sestamibi IV at stress on [ ] and [ ]mCi Tc-Sestamibi IV at rest on [ ]

**PROCEDURE:** 2-day Myocardial Perfusion Scan with Tc-Sestamibi. Gated stress SPECT imaging was performed after pharmacological stress with 0.4mg Lexiscan IV administered by Cardiology. Rest SPECT imaging was performed on a separate date.

**FINDINGS:** [ ]. No transient ischemic dilation (TID) at stress. Left ventricular ejection fraction is [ ]% (normal 45% or above). Normal wall motion.

**IMPRESSION:**
1. No ischemia or infarct.
2. Ejection fraction of [ ]% with normal wall motion.

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**NM MPS INCOMPLETE**

**DISCLAIMER:** ORIGINAL ORDER WAS CHANGED TO SINGLE STUDY SINCE PATIENT REFUSED TO RETURN FOR [RESTING] PORTION OF MYOCARDIAL PERFUSION SCAN.

**RADIOPHARMACEUTICALS:** [ ]mCi Tc-Sestamibi IV at [stress] on [ ]

**PROCEDURE:** [Stress]-only Myocardial Perfusion gated SPECT imaging after pharmacological stress with 0.4mg Lexiscan IV administered by Cardiology. Despite multiple attempts at scheduling, patient refused to return for [resting] portion of Myocardial Perfusion scan.

**FINDINGS/IMPRESSION:**
1. Incomplete exam. [Stress]-only myocardial perfusion scan shows [ ]. Cannot exclude ischemia. Patient refused [resting]-portion of exam.
2. Ejection fraction of []% (normal 45% or more) with normal wall motion.

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NM MPS PLANAR

COMPARISON: No previous study available.

RADIOPHARMACEUTICALS: []mCi Tc-Sestamibi IV at stress on [] and []mCi Tc-Sestamibi IV at rest on []

PROCEDURE: 2-DAY PLANAR MYOCARDIAL PERFUSION SCAN. Due to patient's body habitus (beyond camera table weight-limit), very limited planar-only (non-SPECT, non-gated) Myocardial Perfusion Scan was performed at rest and stress in anterior, LAO, and left lateral projections. Stress imaging was performed after pharmacological stress using 0.4mg Lexiscan IV (administered by Cardiology). No ventricular function data could be obtained.

FINDINGS/IMPRESSION: Very limited planar Myocardial Perfusion Scan.
1. No significant ischemia/infarct.
2. No ventricular function data available.

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NM MPS SINGLE MIBI

COMPARISON: No previous study available.

THE ORDER WAS CHANGED TO A SINGLE STUDY SINCE A RESTING STUDY IS NOT MEDICALLY NEEDED.

RADIOPHARMACEUTICALS: []mCi Tc-Sestamibi IV

PROCEDURE: Stress-only Myocardial Perfusion gated SPECT imaging after pharmacological stress with 0.4mg Lexiscan IV administered by Cardiology. Based on results of stress imaging, the rest imaging was cancelled.

FINDINGS: No significant stress perfusion defect. Left ventricular ejection fraction is >70% (normal 45% or above). Normal wall motion.

IMPRESSION:
1. No significant perfusion abnormality.
2. Ejection fraction of \[ \]% with normal wall motion.

\[ \]

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**NM MPS THALLIUM**

**COMPARISON:** No previous study available.

**RADIOPHARMACEUTICALS:** \[ \]mCi Thallium-201 IV

**PROCEDURE:** Myocardial Perfusion Scan with Thallium-201. Gated stress SPECT imaging was performed after pharmacological stress with 0.4mg Lexiscan IV administered by Cardiology followed 3-4hr later by rest SPECT imaging.

**FINDINGS:** [No significant perfusion defect]. No transient ischemic dilation (TID) at stress. Normal lung to heart ratio. Left ventricular ejection fraction is \[ \]% (normal 45% or above). Normal wall motion.

**IMPRESSION:**
1. No ischemia or infarct.
2. Ejection fraction of \[ \]% with normal wall motion.

\[ \]

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**NM VIABILITY ONLY**

**COMPARISON:** Myocardial perfusion scan

**RADIOPHARMACEUTICALS:** total 4mCi Thallium-201 IV (including 1mCi reinjection after 4hr imaging)

**PROCEDURE:** Myocardial Viability Scan with Thallium-201. Resting gated SPECT imaging was performed 10min after radiotracer injection followed by 4hr [and 24hr] re-distribution SPECT imaging.

**FINDINGS:** There is \[ \] wall defect which demonstrates [no significant viability]. Left ventricular enlargement with EDV of \[ \]ml. LV ejection fraction is \[ \]% (normal 45% or above) with global hypokinesis.

**IMPRESSION:** \[ \] wall infarct without significant viability.
NM VIABILITY + PERFUSION

COMPARISON: []

RADIOPHARMACEUTICALS: 3mCi Thallium-201 IV at stress and 1mCi re-injection at rest for 24hr viability

PROCEDURE: MYOCARDIAL PERFUSION AND VIABILITY SCAN WITH THALLIUM-201. Gated-SPECT imaging was performed after pharmacological stress with 0.4mg Lexiscan IV (administered by Cardiology) followed by 4hr resting SPECT imaging and 24hr delayed redistribution (viability) imaging.

FINDINGS: Myocardial Perfusion and Viability Scan with Thallium-201. There is [] wall defect which demonstrates [no significant viability].

Left ventricular enlargement with EDV of []ml. LV ejection fraction is [%] (normal 45% or above) with global hypokinesis.

IMPRESSION:
1. [] wall partial/complete viability.
2. [] wall infarct without significant viability.
3. Depressed LV ejection fraction of [%] with global hypokinesis.

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NM MUGA

COMPARISON: No previous study available. Recent MUGA [] and Baseline MUGA []

RADIOPHARMACEUTICALS: []mCi Tc-RBC (in-vitro labeling) I.V.

TECHNIQUE: Gated dynamic imaging was performed in LAO and additional projections. Using end-systolic and end-diastolic ROIs on LAO projection, left ventricular ejection fraction was calculated.

FINDINGS/IMPRESSION: Baseline MUGA/Follow-up MUGA. Left ventricular ejection fraction is estimated to be [%] (normal 50% or more) with no significant interval change.
In comparison, previously [%] on most recent prior MUGA date and [%] on baseline MUGA date.

Left ventricular end-diastolic volume [ ] mL, end-systolic volume [ ] mL, stroke volume [ ] mL, and cardiac output [ ] L/min.

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NM OCTREOSCANN

COMPARISON: []

RADIOPHARMACEUTICAL: [ ] mCi In-111-Pentreotide (OctreoScan) I.V.

TECHNIQUE: Whole body planar imaging was performed in anterior/posterior projection at 4hr, 24hr, and 48hr after radiotracer injection including SPECT imaging of abdomen/pelvis at 24hr and 48hr.

FINDINGS: []. There is no focal abnormal uptake. Physiologic uptake is seen within the liver, spleen, kidneys/bladder, bowel, and thyroid gland.

IMPRESSION: []

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NM PARATHYROID

COMPARISON: []

RADIOPHARMACEUTICAL: 5mCi Tc-pertechnetate IV and 20mCi Tc-sestamibi IV.

TECHNIQUE: Dual-isotope imaging with post-processing subtraction. Thyroid scan was performed with Tc-pertechnetate followed by early and delayed Parathyroid scan with Tc-sestamibi.

FINDINGS: Thyroid scan was performed with pertechnetate followed by early/delayed parathyroid scan.

No focal abnormal activity on thyroid-parathyroid subtraction imaging or delayed parathyroid scan.
On thyroid-parathyroid subtraction imaging, there is focal residual uptake along inferior aspect of left thyroid lobe suggestive of left inferior parathyroid adenoma. This is also confirmed on delayed parathyroid scan.

**IMPRESSION:** No focal parathyroid adenoma identified.

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**NM PERITONEAL SCINTIGRAPHY**

**RADIOPHARMACEUTICAL:** 5mCi Tc-MAA intraperitoneal via percutaneous catheter

**TECHNIQUE:** Approximately 2000ml of radiolabeled dialysate was instilled into peritoneal cavity via existing percutaneous catheter in sterile fashion by Nephrology nurse. Anterior/posterior static imaging was performed at 1hr and 2hr. Subsequently dialysate fluid was removed.

**FINDINGS/IMPRESSION:** Normal peritoneal scintigraphy. There is homogeneous distribution of dialysate within the 4 quadrants of abdominal cavity without focal fluid collection or evidence for extension into abdominal/inguinal hernia or within pleural cavity. No significant retension. Appropriate volume of dialysate was recovered after exam.

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**NM PET BRAIN**

**COMPARISON:** 

**RADIOPHARMACEUTICAL:** []mCi of F18-FDG I.V.

**PROCEDURE:** Serum glucose of []mg/dl. Brain PET/CT (Biograph mCT Flow with TOF technology) was performed 30min following radiotracer injection from vertex through skull base. Low dose CT images were acquired without IV for attenuation correction and anatomic correlation.

**CT DOSE:** CTDIvol of []mGy and DLP of []mGy-cm.

**FINDINGS:** Bilateral/unilateral symmetric/asymmetric decreased FDG uptake within parietal/temporal/frontal cortices to include posterior cingulate gyri with sparing of sensorimotor and occipital cortices and deep gray matter.
There is normal and symmetric FDG uptake within bilateral cerebral cortices, deep gray nuclei, thalami, cerebellum and brainstem.

No focal anatomic abnormality or atrophy on low-dose noncontrast CT.

**IMPRESSION:**

No specific PET/CT abnormality to suggest etiology of MCI/dementia.

Pattern of cortical hypometabolism is most suggestive of Alzheimer's disease.

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**NM PET MYOCARDIAL**

**COMPARISON:** Myocardial perfusion scan

**RADIOPHARMACEUTICAL:** [mCi of F18-FDG I.V.

**PROCEDURE:** Serum glucose of [mg/dl. Myocardial PET/CT (including chest) was performed 90min radiotracer injection. Patient prep included high-fat, low-carbohydrate diet followed by extended fasting for 12hrs before scan. Low dose CT images were acquired without IV and oral contrast, and were used for attenuation correction and for anatomic correlation.

**CT DOSE:** CTDIvol of [mGy and total DLP of [mGy-cm.

**FINDINGS:**

MYOCARDIUM: []

CHEST/MEDIASTINUM: []

MISC: []

**IMPRESSION:** []

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**NM PET SCAN**

**COMPARISON:** []
**RADIOPHARMACEUTICAL:** [mCi of F18-FDG I.V.]

**PROCEDURE:** Serum glucose of [mg/dl]. PET/CT (Biograph mCT Flow with TOF technology) was performed 45min following radiotracer injection from skull base to mid thighs/head to toe (whole body)/top of head (including brain) to mid thighs. Low-dose CT images were acquired without breathhold or IV/oral contrast, and were used for attenuation correction and for anatomic correlation.

**CT DOSE:** CTDIvol of [mGy] and total DLP of [mGy-cm] (using Body 32cm phantom).

**FINDINGS:**

**BRAIN:** []

**NECK:** []

**CHEST/MEDIASTINUM:** []

**BREAST/AXILLA:** []

**ABD/PELVIS:** []

**MSK/MISC:** []

**IMPRESSION:** No PET/CT evidence for residual or recurrent disease.

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**NM RENAL CAPTOPRIL**

**COMPARISON:** []

**RADIOPHARMACEUTICAL:** [mCi Tc-MAG3 IV on [] for post-captopril renal scan and [mCi Tc-MAG3 IV on [] for baseline renal scan.

**TECHNIQUE:** Hypertensive medications were held for at least 48 hrs prior to study. On day one, post-ACE inhibitor renal scan was performed with 25mg Captopril PO given 1hr prior to radiotracer injection. Patient's blood pressure was monitored throughout the exam with no adverse reaction. Dynamic imaging was performed for 30-40min in posterior projection. On day two, baseline renal scan was performed without ACE inhibitor using same imaging
parameters. No Lasix was given.

**FINDINGS:**

Baseline scan: Differential function is [ ]% left and [ ]% right kidney. Cortical time to peak is [ ] min left and [ ] min right kidney. 20 min/max activity remaining is [ ]% left and [ ]% right kidney. Renogram curve is grade [ ] left and grade [ ] right kidney.

Post-Captopril scan: Differential function is [ ]% left and [ ]% right kidney. Cortical time to peak is [ ] min left and [ ] min right kidney. 20 min/max activity remaining is [ ]% left and [ ]% right kidney. Renogram curve is grade [ ] left and grade [ ] right kidney.

Misc: Symmetric renal size and normal orientation. No hydronephrosis. Time to half max (T1/2) of collecting system activity is [ ] min on the left and [ ] min on the right. This is unchanged on pre- or post-Captopril scan. Post void images demonstrate [ ]. No significant extravasation is noted at the injection site.

**IMPRESSION:** No scintigraphic evidence for hemodynamically significant RAS.

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**NM RENAL LASIX**

**COMPARISON:** [ ]

**RADIOPHARMACEUTICAL:** [ ] mCi Tc-MAG3 IV via [ ]. No extravasation at injection site.

**ANCILLARY PHARMACEUTICAL:** 40mg Lasix IV given at start of the exam (within 1 minutes of radiotracer injection).

**TECHNIQUE:** Dynamic posterior imaging over bilateral kidneys was performed for 30min with Lasix given at the beginning of the study. Static postvoid imaging was also performed.

**FINDINGS:**

**FLOW:** There is prompt/symmetric flow to bilateral kidneys.

**SPLIT FUNCTION:** Differential function at 2min is [ ]% on the left and [ ]% on the right.

**RENOGRAM AND COLLECTING SYSTEM CLEARANCE:** Symmetric renal size and normal
orientation. There is no hydronephrosis or hydroureter. There is prompt rise to peak and
washout of bilateral renal activity. Time to peak activity is approximately [ ] min on the left
and [ ] min on the right (normal 3-5 min). Post-Lasix time to half (T1/2) is [ ] min on the left
and [ ] min on the right (normal less than 10 minutes).

POST VOID: No significant persistent collecting system activity is noted on post void
imaging. Progressive clearance of collecting system activity within upright posture and voiding.
No significant post-void residual bladder volume.

**IMPRESSION:** Normal bilateral renal flow and function without obstruction.

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**NM THYROID PERTECHNETATE**

**COMPARISON:** []

**RADIOPHARMACEUTICAL:** 10mCi Tc-pertechnetate I.V.

**TECHNIQUE:** Thyroid scan performed 20 min after radiotracer injection. Quantitative analysis
was obtained by post-processing of pre-/post-injection syringe imaging.

**FINDINGS:** Homogenous thyroid gland uptake without focal hot or cold nodule. Diffusely
decreased salivary gland activity is noted which is a secondary sign of hyperactive thyroid.
Thyroid uptake is estimates to be [ ]% (normal range 0.4-4.5%).

**IMPRESSION:** In setting of hyperthyroidism, imaging is suggestive of Graves disease with [].

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**NM THYROID UPTAKE**

**COMPARISON:** []

**RADIOPHARMACEUTICAL:** [ ]uCi I-123 P.O.

**TECHNIQUE:** I-123 uptake and scan performed at 24 hrs after radiotracer ingestion.

**FINDINGS:** Homogenous thyroid gland uptake without focal hot or cold nodule. 24 hr
radioactive iodine uptake is [ ]% (normal 10-30%). No thyroid enlargement on physical exam.
**IMPRESSSION:** In setting of hyperthyroidism, imaging is suggestive of Graves disease with elevated 24hr uptake of [ ].

Uptake in normal range may be secondary to exogenous source of iodine.

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**NM VQ SCAN**

**COMPARISON:** chest xray []

**RADIOPHARMACEUTICALS:** [ ]mCi Tc-DTPA aerosol nebulizer and dose 2mCi Tc-MAA IV

**TECHNIQUE:** Planar ventilation scan was performed in multiple projections after Tc-DTPA aerosol nebulizer administration followed by perfusion scan with Tc-MAA IV in similar projections./Planar perfusion scan was performed in multiple projections after Tc-MAA IV. Based on the results of perfusion scan, ventilation scan was deemed unnecessary and therefore not obtained./Planar perfusion scan was performed in multiple projections with Tc-MAA IV followed by ventilation scan after Tc-DTPA aerosol nebulizer administration in similar projections./Planar ventilation scan was performed in posterior projection after Xe-133 gas inhalation (wash-in, equilibrium, and wash-out phases) followed by perfusion scan with Tc-MAA IV in multiple projections./Low-dose lung perfusion imaging performed in multiple projections without ventilation scan./Due to patient's body habitus, limited ventilation-perfusion imaging was performed in anterior and LAO/RAO projections only, with patient in hospital gurney.

**FINDINGS:** [Mildly] heterogenous ventilation with [multiple] matched ventilation-perfusion defects [location] (with ventilation worse than perfusion). No significant mismatched segmental perfusion defect.

Normal ventilation scan without defects or central deposition of radiotracer./Normal ventilation with normal wash-out and no significant air-trapping. No mismatched perfusion defects. No focal opacity on recent chest Xray.

**IMPRESSSION:** [Low] probability for acute PE.

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**NM VQ SHUNT**
COMPARISON: No previous study available for comparison.

RADIOPHARMACEUTICAL: []mCi Tc-MAA IV

TECHNIQUE: Lung perfusion imaging was performed for R to L shunt determination. Whole body was imaged from vertex of skull through mid-thighs. Counts were determined using ROI over region of interest on both anterior and posterior projections with geometric mean calculation.

FINDINGS:

Whole body (WB) counts= []

Lung counts= []

Systemic counts= WB counts - Lung counts= []

Right to left shunt= (Systemic counts / WB counts) x 100%= []% (normal is <5%)

No significant segmental perfusion defects.

IMPRESSION: No significant R to L shunt.

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NM VQ SPLIT LUNG

COMPARISON: []

RADIOPHARMACEUTICALS: []mCi Tc-MAA IV

TECHNIQUE: Quantitative lung perfusion study with split lung analysis. Ventilation was not performed.

FINDINGS: Focal perfusion defect corresponding to known lung mass.

Quantitative perfusion analysis shows total split lung perfusion of []% left lung and []% right lung.

Percent perfusion for left upper lung zone is [], left mid lung zone is [], left lower lung zone is []. Percent perfusion for right upper lung zone is [], right mid lung zone is [], right lower
lungs zone is [%].

**IMPRESSION:** Split lung perfusion as above. [%] lung contributes [%]% to the total lung perfusion (with [%] lung zone contributing [%]% of this [%]%).

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**NM XOFIGO**

**ADDITIONAL HISTORY:** Symptomatic CRPC bone metastasis. No prior Xofigo therapy. Last Xofigo dose 4 or more weeks ago with no reported complications. No current or recent chemotherapy. Patient does not report any incontinence.

**BONE SCAN:** [

**PERTINENT LABS:** [date]
ANC [ ].
Platelets [ ].
Hgb [ ].

**RADIOPHARMACEUTICALS:** [%]uCi Radium-223 I.V. therapy for CRPC (castrate-resistant prostate cancers) bone metastasis.

**XOFIGO INJECTION #1**

**TECHNIQUE:** Pre-therapy laboratory data listed above meets the criteria for therapy. Weight based-dose was prescribed by an Authorized user. The risks, benefits, and potential complications of radioactive Ra-223 therapy were discussed in detail with the patient. Verbal and written informed consent was obtained and take-home written instructions were given for radiation safety precautions. Patient was specifically advised to use universal precautions when using bathroom and handling any bodily fluids for 1 week. Also, if sexually active, to use appropriate contraceptive method to avoid pregnancy for 1 year following therapy. Dose was verified in dose calibrator using calibration factor for Ra-223. Approximately 250cc of NS was given IV followed by Ra-223 IV injection over 1 minute by the Authorized user. No immediate complications.

**IMPRESSION:**
1. Initial Xofigo therapeutic infusion (#1 of 6) with [%]uCi Ra-223 for CRPC bone metastasis.
2. Follow of labs in 3 weeks. Next therapy is planned in 4 weeks.
NM XOFIGO CONSULT

PRE-XOFIGO (Radium-223) THERAPY CONSULTATION

RELEVANT MEDICAL HISTORY: Castrate-resistant prostate cancer (CRPC) bone metastasis. Symptomatic bone pain. No prior Xofigo therapy. Last Xofigo dose 4 or more weeks ago with no reported complications. No current or recent chemotherapy. Patient is not sexually active.

BONE SCAN [:] Multifocal osteoblastic metastasis.

PERTINENT LABS: [date]
ANC []. Platelets []. Hgb [].

WEIGHT: []kg

DISCUSSION: The risks, benefits, and potential complications of radioactive Ra-223 therapy were discussed in detail with the patient. Patient had an opportunity to ask questions and have them answered. Verbal informed consent was obtained. Pre-therapy laboratory data listed above meets criteria for therapy.

30min was spent in consultation.

PLAN: Patient does qualify for Xofigo therapy. Weight-based Xofigo dose was calculated to be []uCi. Initial Xofigo therapy is planned for [].

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adenopathy

No abdominal or pelvic lymphadenopathy.

===

airways

Nonspecific mild airways thickening which can be seen in setting of lower respiratory tract inflammation like bronchitis vs reactive airways disease vs sequela of smoking. No pneumonia.
ankle sprain

Mild ankle soft tissue swelling without acute fracture or dislocation. No joint effusion. Ankle mortise is intact.

arm

Exam is limited due to patient's inability to raise left arm overhead for imaging.

arrhythmia

Ventricular function data can be unreliable in setting of underlying arrhythmia.

athero

Aortic atherosclerosis.

athero 2

Atherosclerotic calcifications.

beyond resolution

likely beyond PET resolution due to small size.

bone

No acute osseous injury or significant DJD.

brain disclaimer
No focal hypermetabolic lesion. Please note that PET scan is not sensitive for detection of brain metastasis.

breast

Breast attenuation noted on raw imaging.

breast artifact

Decreased anterior wall counts related to breast attenuation artifact.

breast shifting

Shifting breast attenuation on raw imaging limits accurate anterior wall evaluation.

breathing

Breathing artifact limits detailed lung evaluation.

bruce

Bruce exercise protocol performed for  min  sec, achieving max HR of  bpm ( % of max predicted HR) with max BP  mmHg and  METs. Clinically negative and electrically negative.

cardio

Cardiomiadiastinal silhouette is normal/stable.

carotid

Dystrophic soft tissue calcification left/right neck may represent carotid atherosclerotic disease.
cast

Overlying cast/splint obscures fine anatomic details.

clinical trial

[Baseline] scan for clinical trial. Interpretation was performed based on PCWG2 response criteria.

compliance

**DISCLAIMER:** original order was changed from [] to [] per [protocol].

constipation

Moderate/significant formed stool is seen throughout colon suggestive of constipation.

COPD

Hyperinflated lungs suggestive of chronic obstructive pulmonary physiology.

coronary

Coronary artery atherosclerotic calcifications.

diaphragm

Diaphragm attenuation noted on raw imaging.

diaphragm artifact

Decreased inferior wall counts related to diaphragm attenuation artifact.
dimension one
(AP x trans)

dimension two
(AP x trans x CC)

disclaimer

**DISCLAIMER:** original order was changed from [] to [] per [protocol].

dose

**CT DOSE:** CTDIvol of mGy and total DLP of mGy-cm (using body 32cm phantom).

EF

Normal ejection fraction and wall motion.

gating issue

Of note there is approximately [% rejected beats suggesting issues with gating which can affect the accuracy of reported EF.

glucose

Elevated serum glucose at time of injection may decrease sensitivity of this test.

gut
Gut crosstalk artifact along inferior wall (limits inferior wall evaluation).

***

healing early

Interval partial/complete obscuration of fracture lucency with sclerosis at fracture site along with periosteal new bone formation, consistent with early healing.

***

healing late

Interval osseous callus formation at fracture site with obscuration of fracture lucency consistent with adequate/continued healing.

***

impression

**IMPRESSION:**
1. .
2. .
3. .

***

improper prep

There is diffuse increased uptake within skeletal muscle throughout the body related to improper preparation (likely recent carbohydrate meal or recent insulin) prior to scan which decreases overall PET scan sensitivity for lesion detection.

***

incomplete

[] was attempted. However, patient was unable to complete the exam due to[]. Only[] were obtained.

***

infiltration

Partial dose infiltration noted at injection site which may underestimate calculated SUV values.
KUB
Normal bowel gas pattern. No bowel obstruction. No abnormal calcifications.

labrum
Small calcification adjacent to left/right superior-lateral acetabulum may represent os acetabula versus sequela of labral degeneration.

large LV
Left ventricular enlargement with end-diastolic volume of [200] ml.

large LV 2
Left ventricular enlargement with depressed ejection fraction of [%] and global hypokinesis.

link
Please see [accession#] from same date for final report.

lumbar spine numbering
There are 6 lumbar type vertebral bodies. For the purposes of this dictation, the last well-formed intervertebral disk level is designated L5-S1.

lungs
Lungs are clear. No acute pulmonary process.

marrow
No focal abnormal bone marrow uptake.

no contrast

Limited solid and hollow viscus evaluation without IV and oral contrast.

no TB

No radiographic evidence for acute or chronic TB.

nodule followup

Follow-up recommended per Fleischner guidelines (see below).

nodule GG

REGIONAL PULMONARY RECOMMENDATIONS FOR GROUND GLASS NODULES

0 - 5 mm: No additional follow up
> 5 mm: Low-dose CT (LDCT) once a year for 3 years; then Pulmonary Dr. Advice

- This only applies to pure ground glass nodules
- Use maximum dimension of nodule to determine recommended management
- All follow up CT scans should be Low Dose CT (71250AJ) without IV contrast
- For multiple nodules the frequency and duration of follow up is based on the size of the largest nodule

Modified From:


nodule part-solid

REGIONAL PULMONARY RECOMMENDATIONS FOR PART-SOLID NODULE

0 - 8 mm: Low Dose Chest CT at 3, 12, 24, and 36 months; then Pulmonary Dr. Advice
>8 mm : Recommend Pulmonary Dr. Advice

- This only applies to part solid, part ground glass nodules
- Use maximum dimension of nodule to determine recommended management
- All follow up CT scans should be Low Dose CT (71250AJ) without IV contrast
- For multiple nodules the frequency and duration of follow up is based on the size of the largest nodule

Modified from:


nodule solid

REGIONAL PULMONARY RECOMMENDATIONS FOR SOLID LUNG NODULE

Smoker (or former smoker):
0 to 4 mm: LDCT at 12 months; if no change, no additional scans
>4 mm to 6 mm: LDCT at 12 and 24 months; if no change, no additional scans
>6 mm to 8 mm: LDCT at 6, 12, and 24 months; if no change, no additional scans
>8 mm: Pulmonary Dr. Advice

Non-Smoker:
0 to 4 mm: no follow up scans
>4 mm to 6 mm: LDCT at 12 months; if no change, no additional scans
>6 mm to 8 mm: LDCT at 12 and 24 months; if no change, no additional scans
>8 mm: Pulmonary Dr. Advice
• All follow up CT scans should be Low Dose CT (71250AJ) without IV contrast
• Use maximum dimension of nodule in using these guidelines
• For multiple nodules the frequency and duration of follow up is based on the size of the largest nodule


===

normal PET

No PET/CT evidence for active disease or recurrence.

===

notify

NOTIFICATION: Above findings were urgently discussed with Dr.[ ] over the phone on [date] at [ ]hrs.

===

ORIF

Status post [ORIF] of [ ] with hardware providing satisfactory alignment. No hardware complication.

===

pancreas cyst guidelines

Imaging Management of Pancreatic Cysts (benign-appearing cyst in asymptomatic patient)

1-5 mm= Too small to characterize, considered benign. No further imaging follow-up recommended.

6-9 mm= Consider single follow-up in 2-3 years, preferably MRCP/MRI pancreas. If stable at follow-up, no further imaging follow-up recommended.

1.0-1.9 cm= Consider follow-up MRCP/MRI or CT pancreas in 1-2 years. If stable at follow-up, lengthen interval imaging follow-up to 2-3 years.

2.0-2.9 cm= Consider baseline EUS, then follow-up MRCP/MRI or CT pancreas in 6-12 mo.
Consider surgery in young, fit patients with need for prolonged surveillance. If stable at follow-up, lengthen interval imaging follow-up to 1-2 years.

>3 cm= Consider baseline or follow-up EUS, then follow-up MRCP/MRI or CT pancreas in 3-6 mo.
Strongly consider surgery in young, fit patients.
For serous cystadenoma, consider referral to Surgery when ≥4 cm.

If growth at any follow-up interval, follow the algorithm for the next cyst size category.

---

**PBT**

[Mild] perihilar peribronchial thickening consistent with lower respiratory tract inflammation or bronchiolitis without pneumonia.

---

**PE**

Suboptimal contrast bolus due to[bolus timing/breathing artifact] with limited opacification and evaluation of [segmental/subsegmental] pulmonary arteries. Within these limitation, no central pulmonary embolus.

Contrast opacification of pulmonary arteries is [excellent/adequate/limited/poor] due to [technical issues with bolus timing/technical issues with bolus timing and breathing artifact]. Within these limitations, there is no central pulmonary embolus. Distal segmental and subsegmental pulmonary arteries are not well opacified and therefore not well evaluated.

---

**penia**

Diffuse osseous demineralization.

---

**pneumonia follow up**

Recommend repeat chest x-ray in 4-6 weeks post-treatment to ensure resolution.

---

**portable chest stable**
Lines and tubes are unchanged from the prior examination. No significant change in cardiopulmonary findings compared to most recent comparison Xray.

post CABG

Apparent septal wall motion abnormality likely related to prior CABG

post reduction

Post-reduction imaging shows restoration of normal alignment at [] joint.

pregnancy

**ADDITIONAL HISTORY:** Pregnant patient. Utility of imaging was discussed/confirmed with ordering provider.

pregnancy test

Negative pregnancy test was confirmed prior to dosing.

prior

[same day] at [] hrs

rejected beats

High percentage of rejected beats suggest issues with gating and possible underlying arrhythmia. Functional data may be erroneous due to heart-rate variability and excessive rejected beats during gating.

repeat

If symptoms persist, consider repeat imaging in 7 to 10 days to exclude occult fracture.
resting EF

Resting LVEF of [%] (normal LVEF 45% or above) and post-stress LVEF of [%].

resting EF 2

Resting EF of [%] and post-stress EF of [%] with [normal wall motion].

scanogram

Leg length is measured from the superior aspect of femoral head to center of tibial plafond. Left leg measures [%]mm and the right leg measures [%]mm with a difference of [%]mm.

Angle between the femoral and tibial mechanical axis is [%]deg [valgus/varus] on the right and [%]deg [valgus/varus] on the left. [No significant varus/valgus deformity].

scoli

[] degrees (cobb angle) [dextro/levo/rotocurvature] of spine centered at [] measured from superior endplate of [] through inferior endplate of []. [No vertebral anomaly or significant pelvic tilt. Iliac apophyses are fused.]

significant

Electronic notification of significant finding was sent to the ordering provider via Health-Connect (electronic medical record).

skeletal survey

Skull:
Chest/ribs:
Spine:
Abdomen/pelvis:
Upper extremities:
Lower extremities:

===

**spurs**
Achilles and plantar calcaneal spurs.

===

**straightening**
Straightening of spinal curvature may be related to paraspinal muscle spasm or strain.

===

**superscan**
There are diffuse/innumerable/extensive/numerous heterogenous/confluent moderate/intense foci of abnormal uptake throughout the axial and proximal appendicular skeleton (including ribs, thoracolumbar spine, pelvis, and proximal humeri/femurs) with overall decreased visualization of kidneys consistent with superscan.

**IMPRESSION:** Extensive diffuse axial and proximal appendicular skeletal osteoblastic metastasis.

Widespread metastatic disease with interval no significant change or decrease or increase in number of foci within location.

===

**systolic thickening**
which demonstrates normal systolic thickening suggestive of attenuation artifact

===

**technical difficulties**
THE ABOVE REPORT WAS INTERPRETED AND DICTATED BY DR. []. DUE TO TECHNICAL DIFFICULTIES, THE REPORT COULD NOT BE FINALIZED AT TIME OF DICTATION. IT WAS SUBSEQUENTLY FINALIZED [WITHOUT EDITING] BY DR. SINGH ON BEHALF OF DR. [].
Preliminary results for this study was provided on-call by Teleradiology.

===

FINDINGS: []

[]

IMPRESSION:
1. []
2. []
3. []

===

FINDINGS:

[]: []

[]: []

IMPRESSION:
1. []
2. []
3. []

===

The exam is significantly limited without IV or oral contrast in this thin patient with minimal intra-abdominal fat.

===

Transient ischemic dilation (TID) at stress may represent left ventricular dysfunction or multivessel disease.