Jane Doe

Clinic: TrueScan
Sex: F
Scan Date: 2025-05-13
Height: 5'5"
Scan Type: Full Body MRI
Weight: 125 lbs
DOB: 1993-07-25

Head

Brain

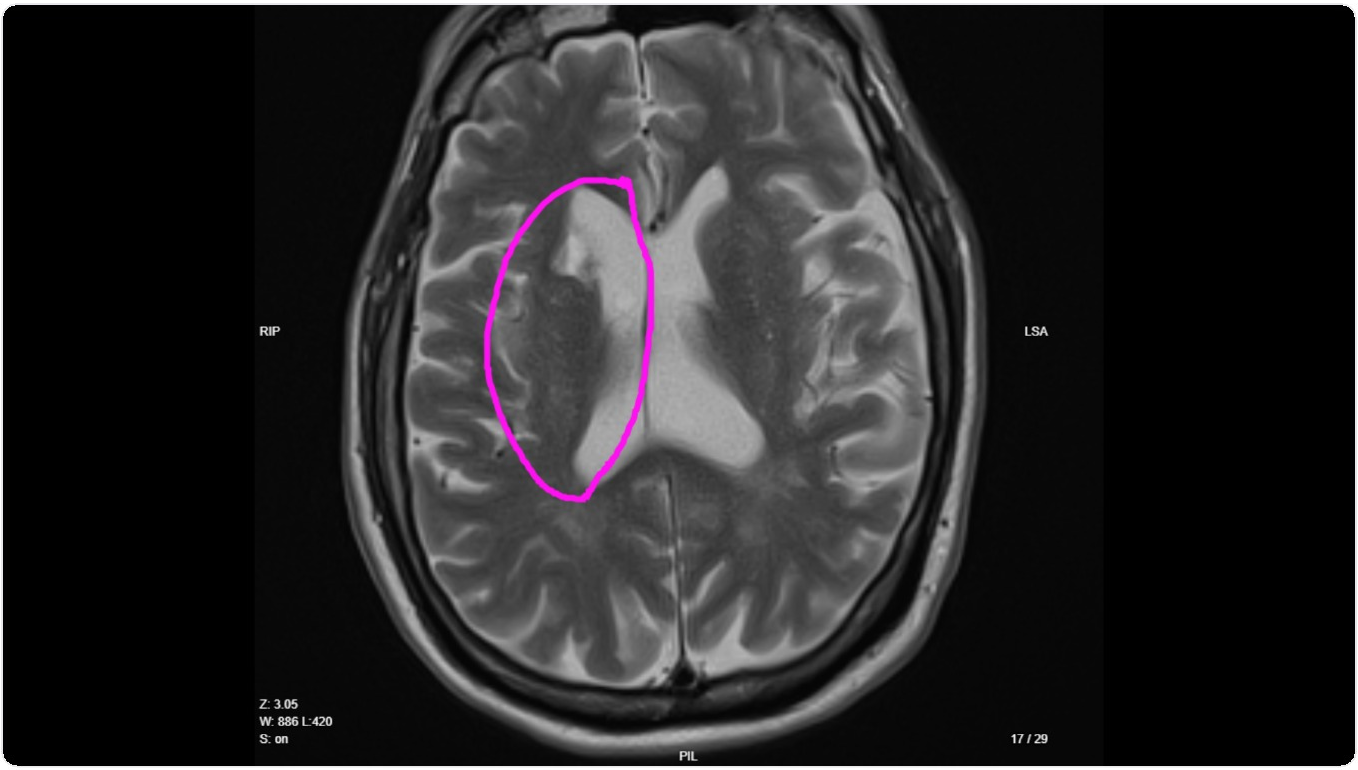
Mild Findings

There are scattered foci of increased T2 signal within the cerebral white matter likely representing small vessel white matter ischemic changes, this is likely appropriate for patient's age. There is cerebral volume loss likely appropriate for patient's age.

There is a 9 mm area of T2 hyperintensity in the right basal ganglia, most consistent with an old infarction.

The brain is structurally unremarkable. The ventricles are normal in size and shape.

MRA imaging of the brain is normal without indication of intracranial aneurysm, stenosis, occlusion, or arterial type vascular malformation.



Eyes

No Adverse Findings

The orbital contents are normal and symmetric.

The optic globes appear normal with normal appearing lacrimal glands, extraocular muscles, and optic nerve sheath complexes.

Sinuses and Mastoids

No Adverse Findings

There is no retained mucus in the paranasal sinuses. There is no significant mucosal thickening. The nasal septum is midline, and the nasal cavity is patent.

The mastoid air cells and middle ear cavities are clear bilaterally.

Neck

Salivary Glands

No Adverse Findings

The salivary glands are normal and symmetric without mass lesion or indication of active inflammation.

Nasopharynx, Oropharynx, and Hypopharynx

No Adverse Findings

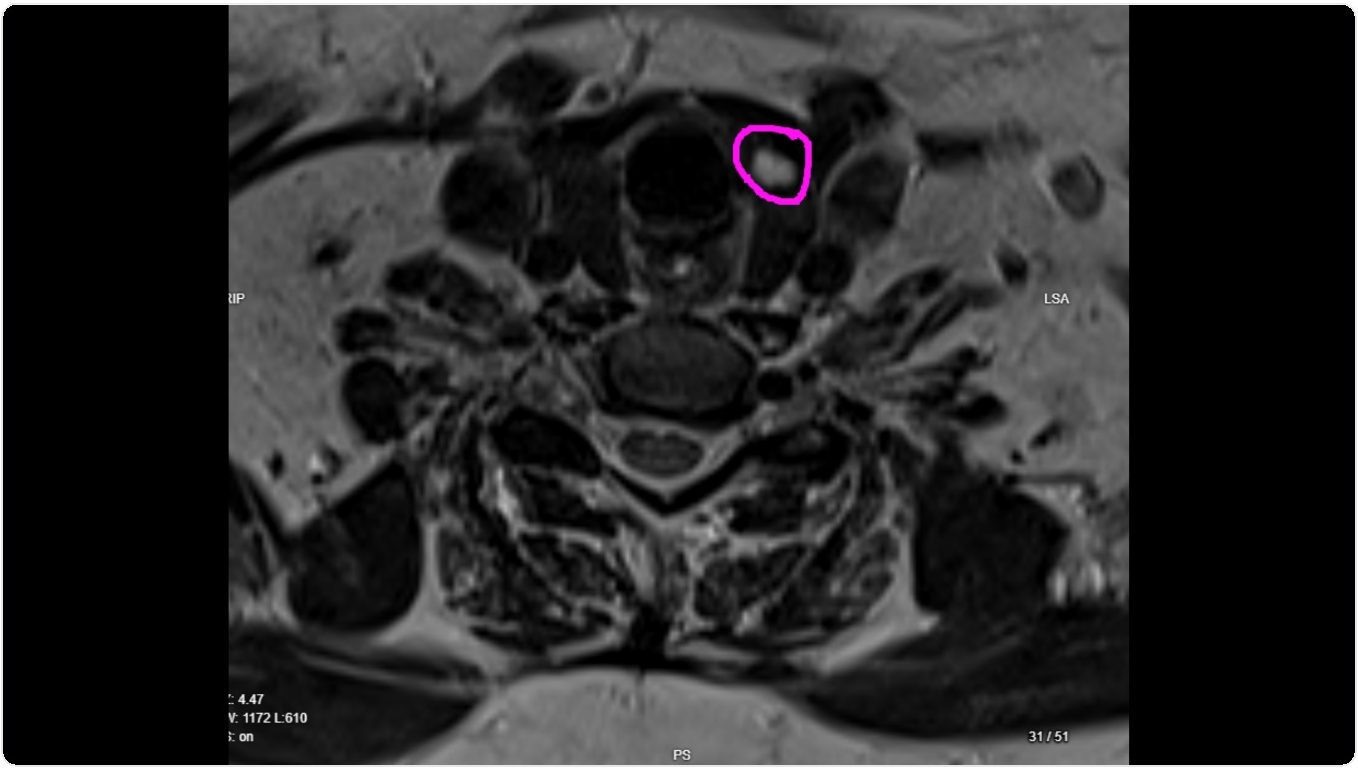
There is no indication of oropharyngeal, nasopharyngeal, or hypopharyngeal mass lesion.

The larynx is unremarkable as seen.

Thyroid

Moderate Findings

There are at least two rounded foci of increased T2 signal within the left thyroid lobe, with the largest measuring approximately 7 mm. Correlation with thyroid ultrasound is recommended.



Cervical Lymph Nodes

No Adverse Findings

Cervical lymph nodes are normal in size, appearance, and distribution.

There is no indication of cervical lymphadenopathy.

Carotid Arteries

No Adverse Findings

MRA of the neck demonstrates normal-appearing carotid bifurcations bilaterally, with no evidence of stenosis.

Normal antegrade flow is observed in both vertebral arteries.

Neck (General)

Moderate Findings

Sub-centimeter thyroid nodules for which thyroid ultrasound is recommended for follow-up.

No other significant neck findings.

Chest

Esophagus

Mild Findings

The esophagus is unremarkable; however, there is a small sliding hiatal hernia measuring approximately 2 to 3 cm. This can predispose to GE reflux.

Thoracic Lymph Nodes

No Adverse Findings

Thoracic lymph nodes are normal in size, appearance, and distribution.

Lungs and Mediastinum

No Adverse Findings

There are no pulmonary masses, nodules, or infiltrates.

There are no pleural effusions.

The central airways are clear.

Heart and Great Vessels

No Adverse Findings

The heart is normal in overall size. There is no pericardial effusion.

The thoracic aorta is not aneurysmal, without suggestion of dissection.

The great vessel origins at the aortic arch appear normal.

The central pulmonary arteries are unremarkable.

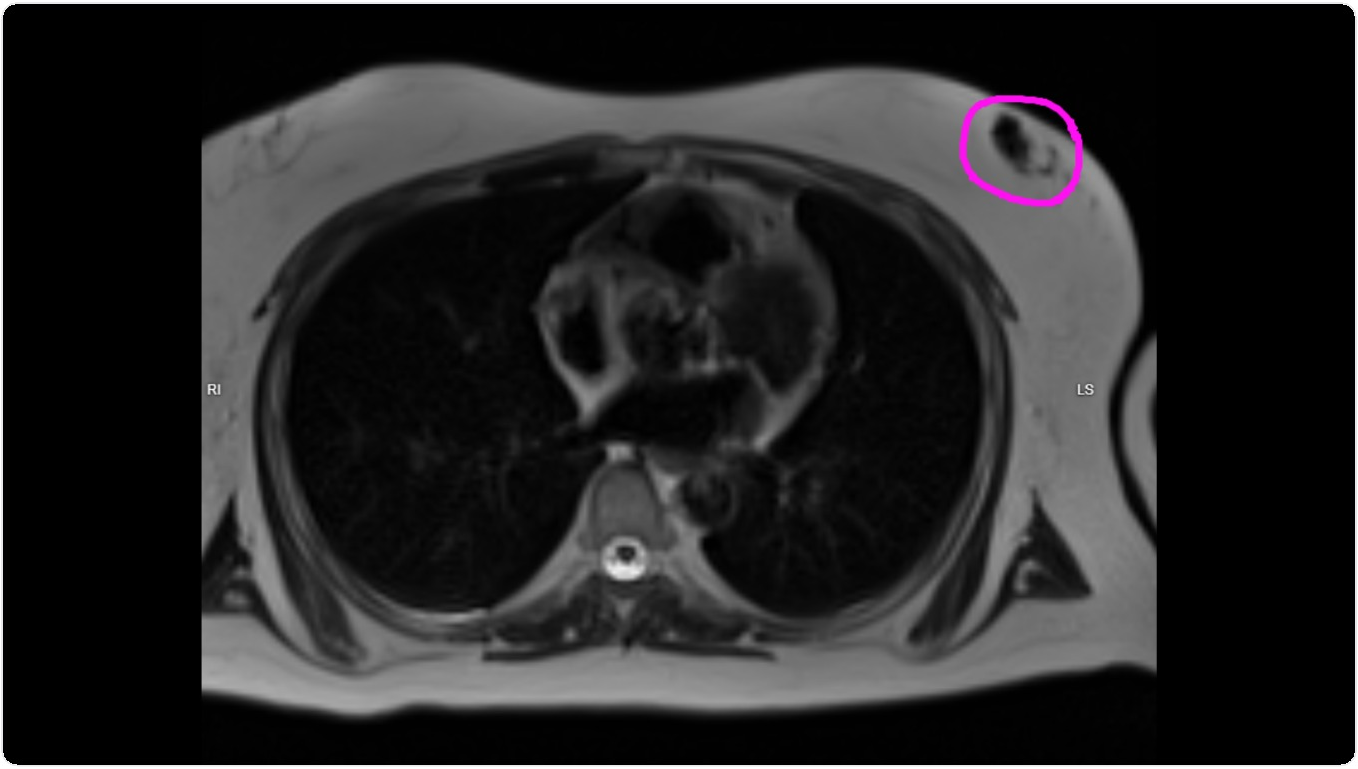
Breasts

Moderate Findings

There is a 16 mm low signal focus deep to the left nipple.

There is no restricted diffusion, which supports a benign etiology (such as postoperative scarring in a patient with prior breast reduction); however, the finding is nonspecific. Recommend further follow-up with mammography if this has not been recently performed.

Unexplained breast pain or nodularity should be further evaluated with dedicated ultrasound, mammography, or dedicated breast MRI.



Chest (General)

Moderate Findings

Nonspecific nodular focus identified in the central left breast; etiology is indeterminate.

Small sliding hiatal hernia.

Abdomen

Stomach

No Adverse Findings

There is normal gastric morphology.

There is no gastric distension or gastric wall lesion.

Liver

Severe Findings

The liver appears structurally unremarkable.

Hepatic fat fraction is estimated at 34%, consistent with severe hepatic steatosis.

Gallbladder and Biliary System

Moderate Findings

The patient has known cholelithiasis with no reported history of cholecystectomy.

The gallbladder lumen is markedly reduced, likely due to chronic contraction and fibrosis surrounding the presumed stones. There is no evidence of gallbladder mass or acute cholecystitis. The extrahepatic bile ducts, including the cystic duct, appear dilated, likely reflecting a physiologic response to the lack of bile storage capacity in the contracted gallbladder. The common bile duct measures approximately 8 to 9 mm, with no intrahepatic bile duct dilation.

Pancreas

No Adverse Findings

There is no pancreatic mass or cyst.

The pancreatic duct is normal.

Spleen

No Adverse Findings

The spleen is within normal limits with regard to size and shape.

Abdominal Aorta

No Adverse Findings

The abdominal aorta is not aneurysmal.

There is no indication of aortic dissection.

Kidneys

No Adverse Findings

The kidneys are unremarkable without hydronephrosis, mass, or significant cyst.

No large or obstructing renal stones are identified.

Adrenals

No Adverse Findings

The adrenal glands appear normal without adrenal mass or hyperplasia.

Bowels

Mild Findings

Small bowel markings are within normal limits.

The appendix is seen and appears normal.

Moderate diverticulosis is present, predominantly involving the lower descending and sigmoid colon, without evidence of acute inflammation.

Abdominal Lymph Nodes

No Adverse Findings

Abdominal lymph nodes are normal in size, appearance, and distribution.

Abdomen (General)

Severe Findings

There is significant hepatic steatosis.

There is probable chronic cholelithiasis and chronic gallbladder contraction/fibrosis, but no acute gallbladder pathology is identified.

There is moderate diverticulosis.

Pelvis

Bladder

No Adverse Findings

No bladder wall lesions are appreciated.

The bladder is unremarkable.

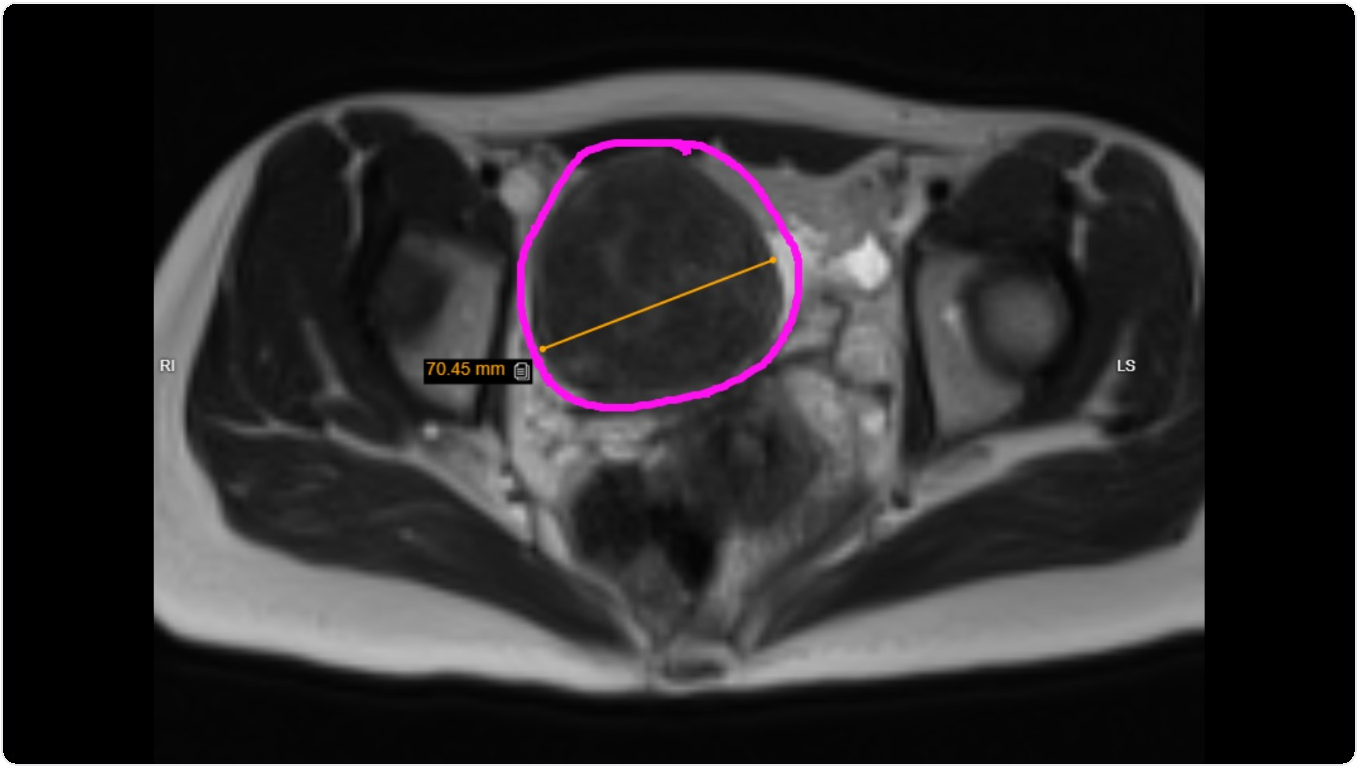
Uterus

Moderate Findings

The uterus is anteverted.

There is no appreciable endometrial thickening.

There is a large right-sided pelvic mass exerting local mass effect on the uterus and urinary bladder. This mass likely arises from the right myometrium and is consistent with a large uterine fibroid, measuring approximately 6.7 × 7.0 cm. Additional smaller myometrial fibroids are present, the largest on the left side measuring up to 2.3 cm. Recommend pelvic ultrasound for further evaluation if clinically indicated.



Ovaries/Adnexa

No Adverse Findings

There are no cystic or solid adnexal lesions.

Pelvic Lymph Nodes

No Adverse Findings

Pelvic lymph nodes are normal in size, appearance, and distribution.

Pelvis (General)

Moderate Findings

Large uterine fibroid. Recommend ultrasound of the pelvis to further evaluate.

There are no other significant or worrisome pelvic findings.

Spine

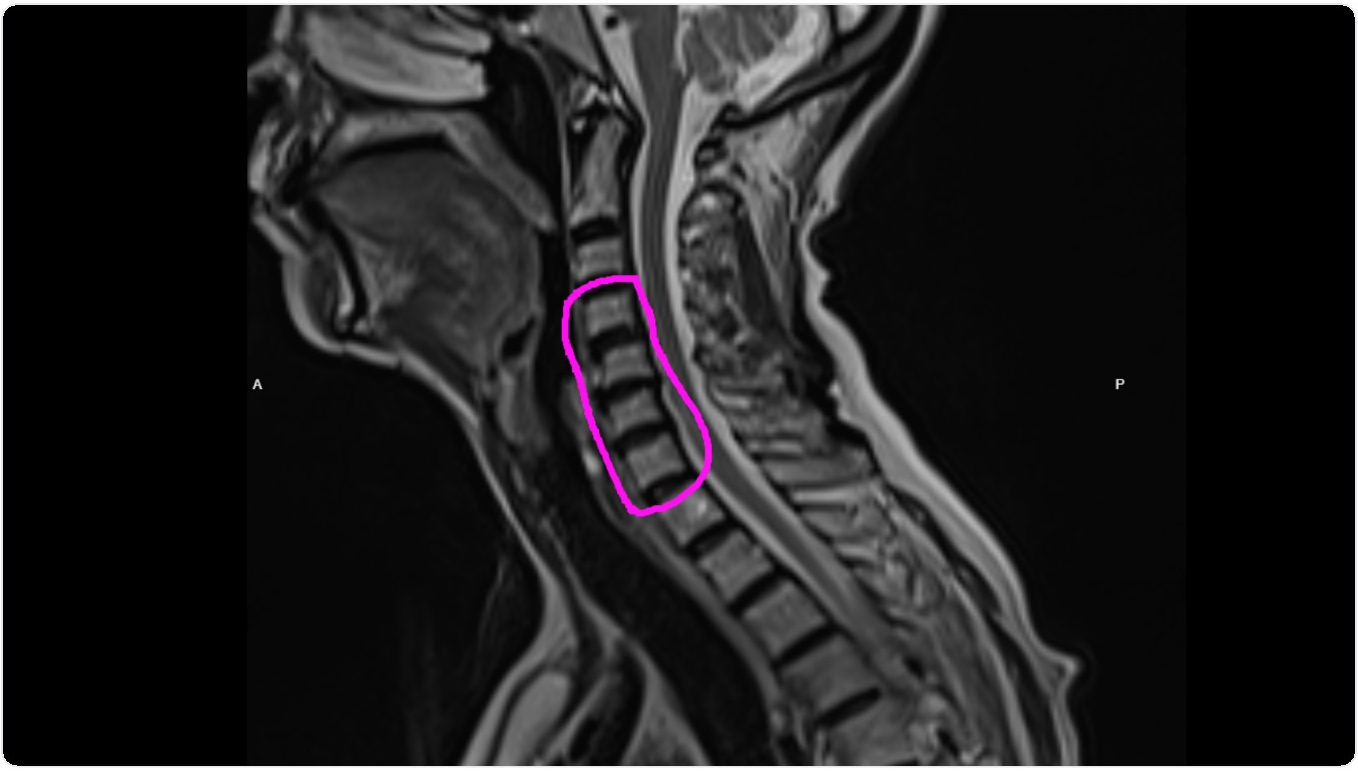
Cervical Spine

Moderate Findings

There is mild degenerative disc bulge at C4-C5 with focal advanced left-sided facet joint osteoarthritis, but no spinal canal or neuroforaminal stenosis at this level.

There is degenerative disc bulging at C5-C6 with degenerative facet and uncovertebral joint osteophyte resulting in mild bilateral neuroforaminal stenosis.

There are minimal degenerative changes at the C6-C7 level without spinal canal or neuroforaminal compromise.



Thoracic Spine

No Adverse Findings

Appearance of the thoracic spine is unremarkable without spinal canal or neuroforaminal compromise.

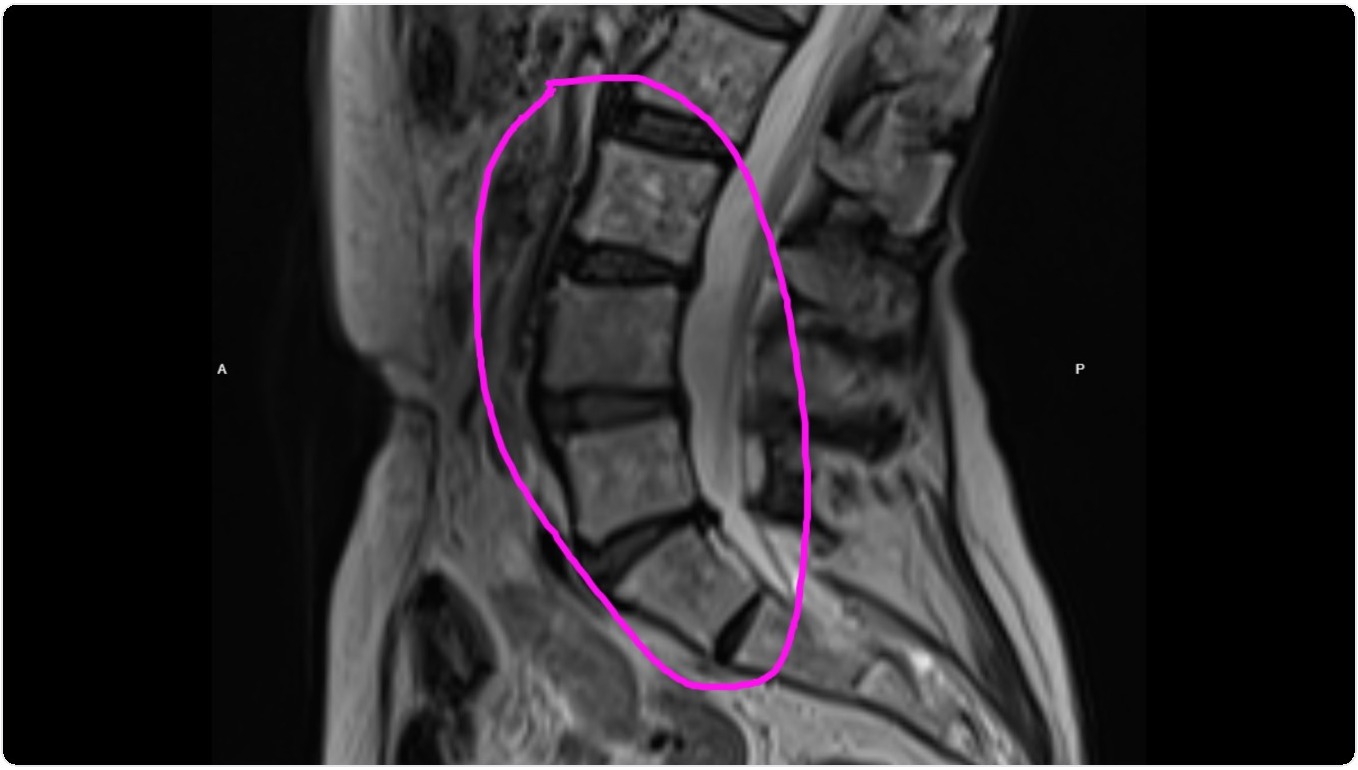
Lumbar Spine

Moderate Findings

There is degenerative disc bulging from L3-L4 through L5-S1, with 3 to 4 mm of spondylolisthesis at L4-L5.

The latter is attributed to facet joint osteoarthritis most advanced at the L4-L5 level.

There is no significant spinal stenosis at any lumbar level but there is mild left sided neuroforaminal stenosis at L5-S1. This could contribute to a left L5 radiculopathy.



Sacrum/Coccyx

No Adverse Findings

There are no significant degenerative changes.

Bone marrow signal is within normal limits.

Spine (Additional)

Informational Findings

There is a mild levoconvex thoracolumbar scoliosis.

There are several benign appearing hemangiomas within the T1, T2, T10, L1 and L2 vertebral bodies. These measure up to a cm and are not expected to be of any clinical consequence.

The spinal cord is unremarkable.

Musculoskeletal

Shoulders

No Adverse Findings

There are no significant arthritic changes.

Sacroiliac Joints

No Adverse Findings

There are no significant arthritic changes.

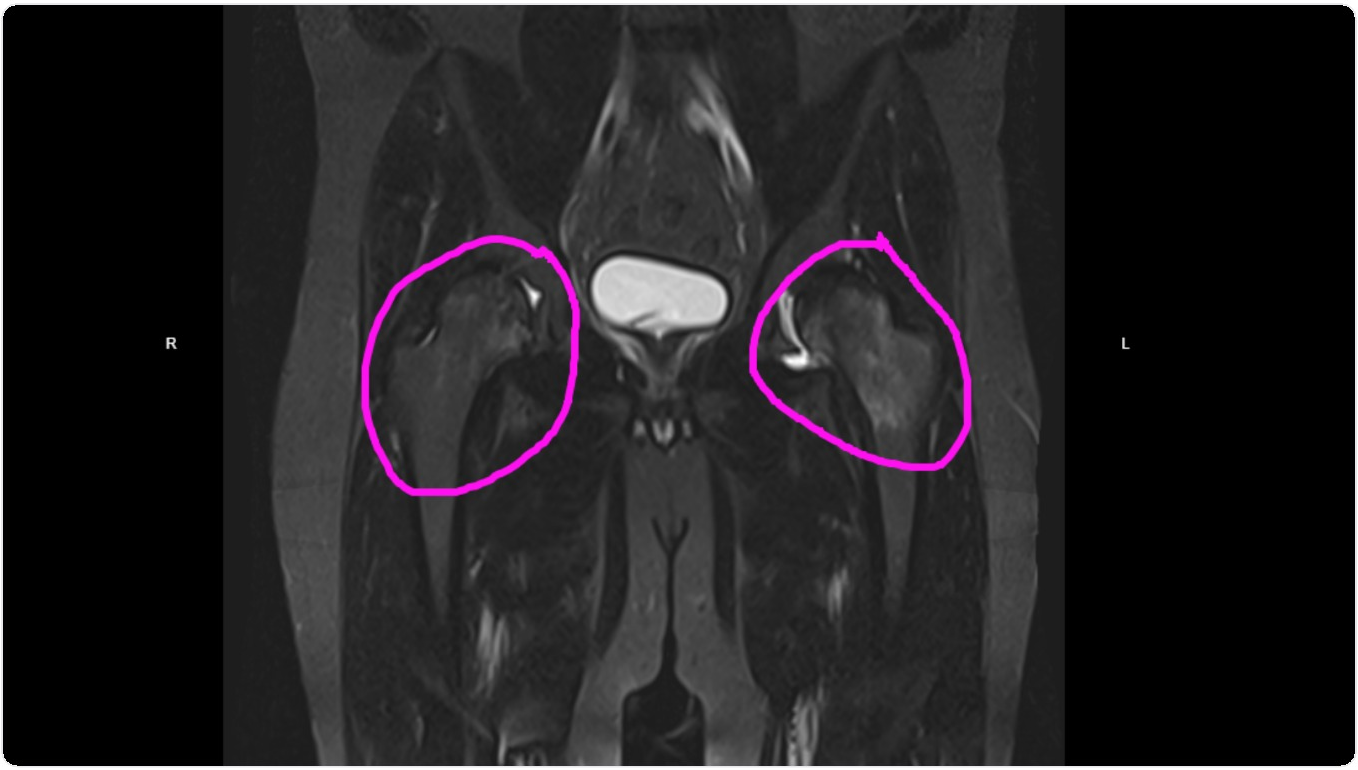
Pelvis and Hips

Moderate Findings

There is diffuse abnormal signal within both femoral heads, suggestive of avascular necrosis, with possible osteochondral collapse of the right femoral head. A small left hip joint effusion is also noted.

Edema is present in both hips, extending from the proximal femur through the left femoral head and involving the right femoral head. Findings are suggestive of avascular necrosis with both acute and chronic components.

There is a 1 cm subchondral cyst within the left femoral head. Recommend orthopedic consultation with follow-up MRI and x-rays as clinically indicated.



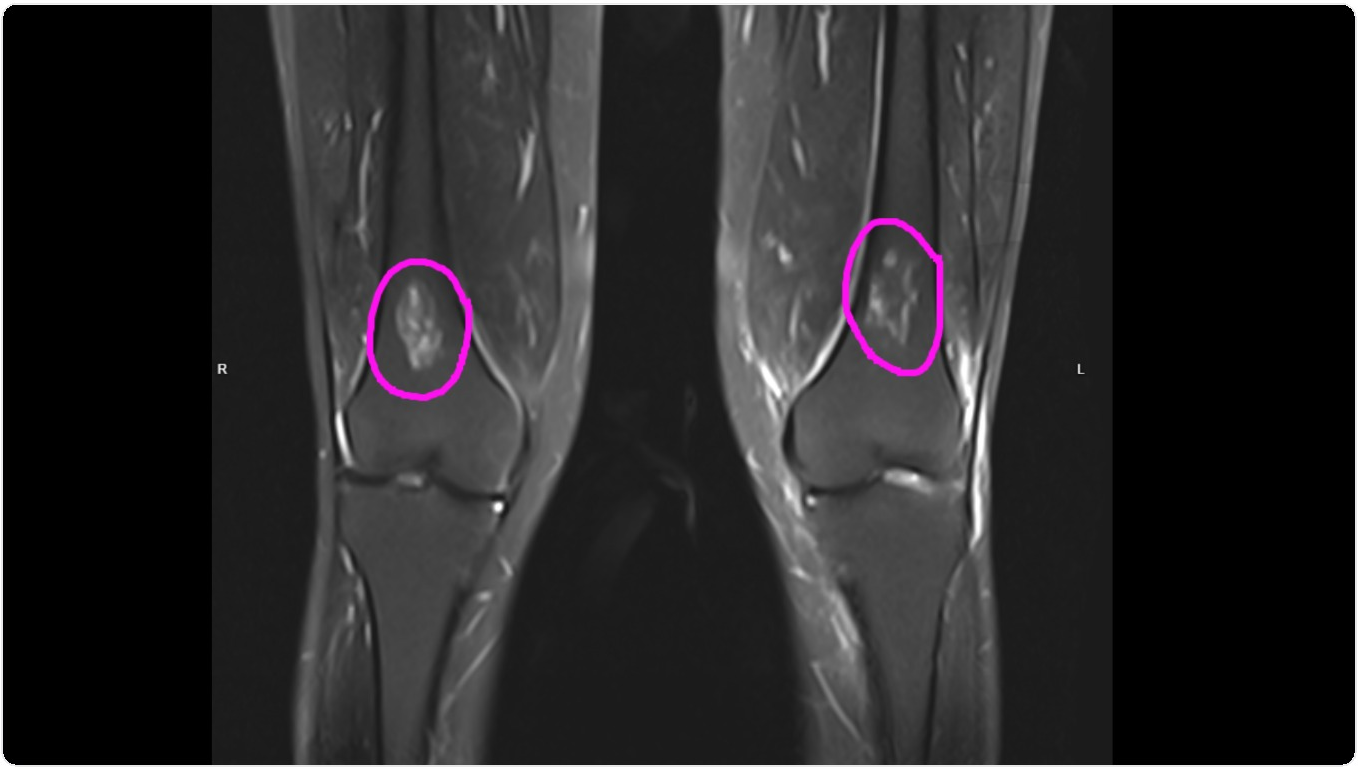
Knees

Mild Findings

There is a 3.4 cm signal abnormality in the distal femoral shaft, suggestive of bone infarction involving both the distal right and left femoral shafts

Mild osteoarthritic changes are present in both knee joints, more pronounced on the left. A small left knee joint effusion is also noted.

Periarticular soft tissue swelling is present in both knees, more pronounced on the left. Correlation with distal femur x-rays is recommended if clinically indicated.



Ankles

No Adverse Findings

There are no significant arthritic changes.

Bony Skeleton and Soft Tissue

Moderate Findings

See above.

Summary

Technique

Scan protocols:

Whole-body: Coronal T1, STIR, DWI; Head: FLAIR, TOF, Axial T2; Neck: Axial T2; Carotid: TOF; Spine: Sagittal T2; Chest, Abdomen, & Pelvis: Axial T2, Coronal T2; Liver: HFF

Discussion

Scope definition:

The TrueScan Full Body MRI (I) serves as an adjunct to, but does not replace, established evidence-based screening methods for early detection of certain malignancies, such as colonoscopy, dedicated breast imaging, pap smears, and low-dose chest CT for high-risk individuals; (II) is effective in visualizing solid lesions of 1 cm or larger within the head, neck, chest, abdomen, and pelvis; as with any medical test, there are limitations that make it impossible to detect all disease conditions; (III) is generally sensitive and specific for detecting cerebral artery aneurysms of 3 mm or greater in size; (IV) does not evaluate lung microarchitecture or pulmonary micronodules; (V) does not provide detailed evaluation of the heart or heart vessels; (VI) has limited evaluation of the gastrointestinal tract and does not replace endoscopy or colonoscopy (e.g. it cannot detect bowel polyps); (VII) is limited in assessing large joints, as the test is not designed for detailed evaluation of cartilage, menisci, ligaments, or the labrum; (VIII) should not be considered a primary screening modality for the skin, which is best assessed through direct physical examination; (IX) is not intended to replace dedicated diagnostic imaging for specific clinical questions; and (X) does not replace dedicated breast screening or diagnostic imaging, such as mammography, breast ultrasound, or contrast-enhanced breast MRI.

Comparison

Previous studies used during interpretation:

None available.

Impressions

Key findings of the report:

Scattered foci of increased T2 signal within the cerebral white matter likely representing small vessel ischemic changes and a 9 mm focus in the right basal ganglia likely representing old infarction.

At least 2 foci of rounded high T2 signal within the left thyroid lobe, largest measuring 7 mm; thyroid ultrasound suggested.

Small sliding hiatal hernia measuring 2 to 3 cm, predisposing to gastroesophageal reflux.

17 mm low signal focus deep to the left nipple, nonspecific; further follow-up with mammography suggested.

Severe hepatic steatosis with hepatic fat fraction estimated at 32%.

Chronic cholelithiasis with probable gallbladder contraction and fibrosis; dilated extrahepatic bile ducts with common bile duct measuring 8 to 9 mm.

Moderate diverticulosis mostly within the lower descending and sigmoid colon.

Large uterine fibroid measuring 6.8 x 7.0 cm with local mass effect; recommend pelvic ultrasound for further evaluation.

Minimal degenerative disc bulge at C4-C5 with advanced left-sided facet joint osteoarthritis; degenerative disc bulging at C5-C6 with mild bilateral neuroforaminal stenosis.

Degenerative disc bulging at L3-L4 through L5-S1 with 3 to 4 mm L4-L5 spondylolisthesis and mild left-sided neuroforaminal stenosis at L5-S1.

Diffuse abnormal signal within femoral heads bilaterally suggesting avascular necrosis with possible osteochondral collapse of the right femoral head; orthopedic consultation advised.

Signal abnormality of the distal femur shaft suggesting bone infarction and mild osteoarthritic changes of the knee joints bilaterally.

Next Appointments

Recommended follow-up steps:

A full body MRI follow-up is recommended in 12-18 months.

Recommend thyroid ultrasound to evaluate thyroid nodules.

Suggest mammography for further evaluation of the left breast finding if not recently addressed.

Consider ultrasound of the pelvis to further evaluate the large uterine fibroid.

Recommend orthopedic consultation for suspected avascular necrosis in the hips. Follow-up imaging with MRI and x-rays of the hips as clinically warranted.

Suggest clinical correlation and potential intervention for severe hepatic steatosis.

Consider further evaluation of gallbladder contraction and fibrosis with hepatobiliary imaging or surgical consultation if symptomatic.

Recommend clinical correlation for lumbar spine findings that could contribute to left L5 radiculopathy.

Radiologist:

Dr. Derek Joseph Shepherd

Date Signed:

July 9, 2025 at 02:33 PM

Signature:

Dr. Derek Joseph Shepherd