Modalities of Choice

Please call: 303.446.3224 to speak with a Radiologist 24/7 if you have questions.

HEAD/BRAIN

CT without contrast

- Headache
- Trauma
- Stroke/Hemorrhage
- Post operative
- Shunt assessment (Pediatric, use fast MRI protocol)

CT with contrast

Tumor/Infection (If contraindication to MRI)

MRI without contrast

- Dizziness/Headaches
- TIA/Stroke evaluation (MRA also if no CTA)
- Subacute or old trauma

MRI with contrast

- Tumor/Infection/Inflammatory disease
- Multiple Sclerosis/Prolonged Bell's Palsy/CN deficits (Cranial Nerve Palsy)/Pulsatile Tinnitus/pituitary

MRA

- Cerebral aneurysm
- Carotid/Vertebral stenosis (if CTA is not possible)
- Aorta and great vessels
- Dissection

MRV

Dural venous sinus thrombosis or stenosis (if the CTV is not an option)

NECK/FACE

CT without contrast

- Paranasal sinus evaluation
- Trauma (R/O fracture)
- Tracheal stenosis

CT IAC (Temporal Bones) without contrast

- Inner ear path or basilar skull fracture.
- Infection with subperiosteal abscess or dural venous sinus involvement (add contrast)

CT Orbit Foreign Body

Pre-MRI screening for metals

CT with contrast (Facial or Orbital)

Trauma/Facial Infection/Inflammatory disease/Tumor

CT neck with contrast

R/O mass/Tumor/ Infection/Inflammatory disease/Congenital cysts

MRI Soft Tissue Neck with and without

Mass/Fluid collection/Neck primary/Infection/Inflammatory disease

SPINE

MRI without contrast

Preferred for evaluation of disc and facet degeneration leading to pain and neurological symptoms

MRI Lumbar without contrast

LBP/Radiculopathy

MRI Lumbar with and without contrast

Previous lumbar surgery/ Tumor/Infection

MRI Thoracic without contrast

Pain/Trauma

MRI Thoracic with and without contrast

Syrinx/Demyelinating Disease/Tumor/Mets/Infection

MRI Cervical without contrast

- Neck pain/Occipital HA
- Trauma/Radiculopathy/Chiari I

MRI Cervical with and without contrast

- Demyelinating Disease/Tumor
- Mets/Infection/Syrinx

MRI with contrast

- Evaluate disc and facet disease WITH history of prior spine surgery
- Spinal cord evaluation demyelination/Tumor

CT without contrast

- Acute trauma
- Post surgical hardware assessment
- Primary bone lesions

EXTREMITIES

MRI without contrast

• Trauma/Pain

MRI with and without contrast

Mass or Lump/ Osteomyelitis/Sarcoma or Mets

MRI Arthrogram Knee

Meniscal surgery (Depends on Physician)

MRI Arthrogram Shoulder

Tears (Depends on Physician) MRI Arthrogram Wristars (Depends on Physician)

CHEST

CT Chest without contrast

F/U on lung nodules/or initial evaluation <1cm nodule

CT Chest with contrast

Lung mass or nodule >1cm on CXR/known lung

Hi-Resolution CT Chest without contrast

Evaluate for diffuse lung disease/ ILD/Bronchiectasis/Air **Trapping**

CTA Pulmonary Angiogram with contrast

- R/O PE/SOB/Hypoxia
- Preferred over VQ unless contraindication to IV contrast.

ABDOMEN/PELVIS

CT with Contrast

All standard abdominal imaging - Pain/Weight loss/ R/O Cancer/Cancer Staging/Diverticulitis/ Appendicitis/Pyelonephritis.

CT without IV or Oral Contrast

Renal Stones

CT with and without IV Contrast

- Painless Hematuria
- Initial work up of pancreatitis
- Evaluate renal mass or renal cyst

US

- Use first in Pediatrics.
- Initial test of choice for cholecystitis/gallstones.
- Pelvic pain in female.
- Appendicitis Pediatrics or if young, thin female - can do US first if ovarian cyst is also in the differential.
- Screen for AAA.

CT Coronary Calcium Score

Screening for coronary vascular risk stratification in asymptomatic patient.

MRI/MRA

Problem solving or elevated creatinine

MRA or multi-detector CTA with contrast

Renovascular Hypertension

BODY MRI

- Problem Solving/Lesion Characterization
- CT contrast allergy

MRI ABDOMEN without contrast

Adrenals/MRCP

MRI ABDOMEN with contrast

Renals/Liver/Spleen/Pancreas/Mets

MRI Pelvis without contrast

Uterine anomaly

MRI Pelvis with and without contrast

Uterus fibroids/ Endometriosis/Ovarian mass

