

MRI VS. CT A QUICK REFERENCE FOR PHYSICIANS

MRI GENERALLY USED

MRI/CT EQUAL OR COMPLIMENTARY

CT GENERALLY USED

HEAD AND NECK

- Acoustic and other nerve neuromas*
- Posterior fossa and brain stem pathology*
- Dementia/Small vessel ischemic changes
- Demyelination Neurodegenerative disease* (e.g., MS)
- Dural venous sinus thrombosis
- Inflammatory or infectious process
- Sella and pituitary*
- Neck pathology
- Neoplasia - primary & metastatic*
- Seizure evaluation*
- Parathyroid adenomas
- Congenital anomalies of the brain
- Vascular malformations*
- Parathyroid adenoma*
- Orbits

- Hydrocephalus*
- Cerebral infarction*
- Headache - screening study*
- Nasopharynx

- Acute hemorrhage
- Head trauma
- Subarachnoid hemorrhage (acute severe headache)
- Middle ear*
- Calcifications (i.e., Neoplasm)
- Paranasal sinuses

SPINE

- Congenital anomalies
- Radiculopathy cervical & thoracic spine myelopathy*
- Neoplasia*
- Syringomyelia
- Diseases of spinal cord (e.g., MS)*
- Cranial-cervical junction
- Scar versus recurrent disk*
- Diskitis/osteomyelitis*

- Radiculopathy - lumbar spine
- Spinal stenosis
- Disk pathology

- Advanced spondylosis or osteophytosis
- Bony abnormalities
- Spinal trauma - bony

THORAX

- Cardiac masses

- Aortic dissection*
- Pericardial disease* (Mediastinal masses)

- Lung pathology*
- Pleural disease*
- Hilar masses*

ABDOMEN

- Hemangiomas*
- Venous thrombosis
- Hemochromatosis

- Liver metastases*
- Renal tumor staging*
- Sub-diaphragmatic pathology*
- Aortic disease*

- Liver pathology (except hemangioma)*
- Spleen*
- Pancreas*
- Kidney*
- Adenopathy*
- Abscess*
- Abdominal mass*
- Acute trauma
- Adrenal disease*

PELVIS

- Uterine fibroid evaluation
- Endometrial carcinoma staging*

- Cervical, endometrial, prostate, rectal & bladder carcinoma staging*

- Adenopathy*

BONES, JOINTS AND SOFT TISSUE

- Acute bone injury
- Avascular necrosis
- Bone marrow disorders
- Shoulder-cuff tears & other pathology knee-cartilage, meniscus, ligaments, masses joint loose bodies
- Bone & soft tissue neoplasms*
- TMJ
- Osteomyelitis
- Ankle
- Hips
- Elbow & wrist

* Indicates exam which may require intravenous contrast
(CT Scan patient over age 65 need current BUN and creatinine)



CALL 800.734.4132





COMMON CONTRAINDICATIONS

- Cardiac pacemaker or defibrillator
- Implants neurostimulator (TENS unit)
- All cerebral aneurysm clips
- Insulin pump
- Metallic cardiac valve prosthese
- Procine cardiac valve prostheses
- Ball-valve type penile prostheses (Omni-Phase)
- Permanent hearing aid/cochlear implant
3M/house and 3M/Vienna
- Undetachable Holter's monitor or defibrillator
- Mandatory respiratory dependency
- Embedded shrapnel fragments or metal foreign body in eye (e.g., known metal worker)
- Persistent tremor or movement disorder (relative contra indication)
- Inability to maintain supine or prone position (relative contra indication)
- Mandatory continuous IVAC intravenous catheter system
- Esophageal pH monitoring

WARNINGS

- Implanted surgical clips or other ferromagnetic materials
- Fetuses or infants
- Ferromagnetic materials
- Decompensated cardiac patients and febrile patients
- Permanent eye-liner or make up
- Conductive or magnetically active fragments in or near the eye

PRECAUTIONS OF PATIENTS

- At great risk of cardiac arrest
- Likely to develop seizures or claustrophobic reactions
- Unconscious, heavily sedated or confused

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