Commonly Ordered CT Procedures And Their Indications

The procedures and indications below are guidelines for commonly ordered CT procedures. If you have any questions in regards to ordering or scheduling a CT procedure, please feel free to contact the CT Scan Department at 742–2674 option #3 or a Radiologist at 740–2692.

Brain CT WITHOUT Contrast
Indications include:
- CVA
- Stroke
- Acute Trauma
- Shunt Function
- Sudden onset of new headache
- TIA
- Vertigo/Dizziness

Brain CT WITH Contrast
Indications include:

Brain CT WITHOUT & WITH Contrast
Indications include:
- Follow up of known tumor
- Headaches
- Metastasis

Pituitary CT Scan
Indications include:
- MRI W/WO is the preferred exam for Pituitary disorders.
- If the patient cannot tolerate an MRI, and a CT Scan must be done, order the CT Scan study WITH CONTRAST only.

Mastoids/IAC’s WITHOUT Contrast
Indications include:
- Evaluation of middle ear ossicles
- Mastoids
- MRI W/WO is the preferred exam for an acoustic neuroma.
- If the patient cannot tolerate an MRI, and a CT Scan must be done, order the CT Scan study

Neck CT Scans
Indications include:
- Soft tissue masses such as in the larynx, trachea, and blood vessels in the neck.
- Routine neck CT scans are done WITH CONTRAST.
- Salivary gland stone is W/O & W contrast
- Parathyroid scan W/O & W

Chest CT Scan WITH Contrast
Indications include:
- Masses, evaluation of nodules, cancer or metastatic disease
- Obstructive processes
- Pulmonary Embolism or dissection (see CTA Chest)

Chest CT Scan WITHOUT Contrast
Indications include:
- Pulmonary fibrosis or interstitial lung disease (This is also referred to as a High Resolution Chest Study)
- Follow up of known nodules if no previous mediastinal findings

Abdominal CT Scan
Note: In CT, an Abdomen scan is only performed from the top of the liver to the bifurcation of the abdominal aorta, which is at the level of the iliac crest. Anything concerning small or large intestine, vascular system, or urinary tract should be ordered as an Abdomen/Pelvis CT.

Pelvis CT Scan
Note: In CT, a Pelvis scan starts at the iliac crest and goes through the symphysis pubis.

Abdominal/Pelvis/WITH Contrast
Note: Should be ordered for any patient with RLQ or LLQ pain, any question of appendicitis, diverticulitis, or any type of colon cancer, ileus, inflammatory bowel disease, abscess, and Crohn’s disease. An Abdomen/Pelvis should be ordered for any exam in which there are questions of any intestinal involvement

Abdominal/Pelvis/WITHOUT Contrast
Indications include:
- If you are looking for a Kidney Stone Study, you must order as a "Kidney Stone Study"
- Retroperitoneal bleed
- High creatinine or severe contrast allergy precluding premedication

Abdominal CT Scan WITH and WITHOUT Contrast
Indications include:
- Adrenal lesions
- Kidney lesions, hematuria protocol
- Liver lesions

Spine CT Scans
Indications include:
Note: CT and MRI have different uses for examining the spine; CT best evaluates the bony cortex while MRI evaluates the narrow cord, discs, and ligaments.
- Thoracic spine CT Scans – vertebrae levels must be specified on the physician’s order for a CT scan.
- Trauma

Extremity CT Scans
Indications include:
- Generally ordered WITHOUT Contrast
- Coronal and sagittal reformats are included with all extremity work
- Please indicate if 3D reconstructions are needed (usually only needed for preoperative planning)

CTA Chest WITH and WITHOUT Contrast
- For Pulmonary Embolism (PE) Study or thoracic aortic dissection.

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