UCSD Radiology / Emergency Medicine

Initial Abdominal / Pelvic CT Contrast Guideline

This guideline provides information on the use of IV and oral (PO) contrast for initial abdominal/pelvic CT scans ordered from the ED. Please note this is not a complete list of the protocols available for imaging of the abdomen. Use of contrast is based on the clinical indication and suspected diagnosis for which the CT scan is ordered. These are meant solely as a guideline, variation may occur as a result of the patient's clinical presentation and co-morbid conditions, the physician's clinical judgment, and the radiologist's expertise.

IV[1] Contrast (No PO) Indications:
Aortic Pathology
Appendicitis
Diverticulitis
Obstruction
Perforation

IV[1] & PO (Low Attenuation Contrast – water or Volumen) Indications:
GI Bleed
Inflammatory Bowel Disease
Ischemic Bowel

IV[1] & PO (High Attenuation Contrast) Indications:
Gynecologic Pathology[2]

Non-Contrast Indications:
Renal Stone / Colic
Contraindication to IV Contrast[3]

Special Consideration: Pregnant Patients and Abdominal/Pelvic Imaging

A – US is often the initial study of choice

B – MRI is preferred over CT, however, either modality may be obtained based on radiology attending preference and clinical scenario

Notes:

1 Check creatinine on all pts 60 yrs of age or older or with high risk medical conditions (renal disease, hypertension, recent chemotherapy, DM); if creatinine > 1.5 or GFR <50, radiologist must approve contrast in light of the renal function. Creatinine must be within the last 6 weeks, assuming the patient's condition has not changed in the interim. Please note that exceptions can be made if the patient's condition requires an expedited exam. Please see the most recent Contrast Media Guidelines MCP for the appropriate measures to take in these situations.

2 Ultrasound is often the imaging modality of choice, particularly with pregnant patients.

3 Patients who should normally receive IV contrast, but cannot due to contraindications, often benefit from high attenuation oral contrast to distinguish bowel from pathology.