

Computed Axial Tomography (CT) Protocol		
Title:	Body Imaging CT Protocol: Abdomen and Pelvis Urogram With and Without Contrast	PRO-BI-CT-35
Issuing Department/ Committee/Body:	Body Imaging Section	Effective From 01 June 2022 Until Next Updated
Policy Owner:	Clinical Science Specialist (CSS) for CT	
Approval:	Body Imaging Section Physician Leads	

PROTOCOL

This set of guidelines was designed and intended for an average sized adult body habitus. Due to variations among scanners, it is not possible to document all parameters, however critical parameters are included and should be adhered to unless otherwise approved by the supervising radiologist.

No full scans should be repeated without radiologist direction, exceptions are short segment repeats due to gross patient motion or small range additional scans to include missed anatomy.

- Dose reference values (CTDIvol) are given based on a “per series” value and not in accumulated values unless otherwise indicated.

CPT CODE(S)

ANATOMY EVALUATED

Abdomen, pelvis

INDICATION

Specifically ordered as “CT IVU” for hematuria.

PREPARATION

The patient should drink 24 to 32 ounces of water 30 minutes prior to the examination. The patient should not void unless they are uncomfortable due to distended bladder prior to examination.

IMAGING

Shielding should be utilized according to facility policy. If utilized, shielding for CT should only be used if the radiologist agrees that it will not interfere with the examination.

- Document if the patient has had or will have a cystoscopy.
- Administer the contrast a split dose following the non-contrast abdominal and pelvic examination.
 - Dose 1: Loading dose of 50-60mL followed by a 350 to 500mL saline drip. Have the patient stand and walk, if possible or at a minimum sit up a few times and then wait 14 to 16 to allow excreted contrast to fill the bladder.
 - Dose 2: Administer 70 to 90mL as a bolus and scan the portal venous phase of abdomen and pelvis with a 90 second delay.

Body CT PROTOCOL: Abdomen and Pelvis Urogram With and Without Contrast			
Localizer(s)	Frontal, Lateral if Required		
Scan Series	Abdomen/Pelvis	Abdomen/Pelvis	Delayed AP scout KUB
Scan Phase	Non-contrast	Post contrast	Post contrast
Instructions	Inspiration	Inspiration	Inspiration
Contrast Agent	-	300, 350, or 370	-
Volume and Rate	-	50-60ml + 70-90ml/3.0-3	-
Contrast Delay	-	90 sec	-
Start	Diaphragms	Diaphragms	Diaphragms
End	Symphysis	Symphysis	Symphysis
Scan Type	Helical	Helical	Scout
kVp	120-140	100-120	80 kVp, 80mA
Target CTDIvol	<10.0 mGy	<10.0 mGy	-
Max CTDIvol	25 mGy	25 mGy	-
Max Scan Time	25 sec	25 sec	-
Pitch	0.9-1.75:1	0.9-1.5:1	-
DFOV	To body wall	To body wall	512mm on Siemens
Send to PACS	AX 1x1 standard	AX 1x1 standard	
	COR 2x2 standard	COR 2x2 standard	
		SAG 3x3 standard	

ASSOCIATED DOCUMENTS

- Patient Shielding for Procedures Using X-Rays
- Pediatric CT Protocol: Basic Operating Requirements and General Notes
- Uniform Guidelines for Use of Iodinated Agents

REFERENCES

This protocol is based on evidence-based techniques, Image Wisely guidelines, ACR dose limit recommendations, and with the consultation and review of board-certified body radiologists and board-certified medical physicists. They are designed to minimize the amount of radiation while maximizing the yield while producing diagnostically acceptable image quality.

REVIEW/REVISION HISTORY

Review/Revision	Summary of Review/Revision	Effective Date (month/day/year)
Original	Original document	06/01/2022
Revision	Unknown detail	05/03/2023
Revision	1. Transferred contents into the approved template.	03/12/2025