

Computed Axial Tomography (CT) Protocol		
Title:	<b>Body Imaging CT Protocol: Abdomen and Pelvis Routine With Intravenous (IV) Contrast</b>	PRO-BI-CT-33
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**

Suspected acute appendicitis, abdominal pain, fever of unknown origin (FUO), weight loss, bowel obstruction, nausea, vomiting, diarrhea, pancreatitis, elevated lipase and/or amylase, epigastric pain, pseudocyst, elevated liver function test (LFT), follow-up to an abdominal aortic aneurysm

### **PREPARATION**

None

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.

## **IMAGING**

<b>Body CT PROTOCOL: Abdomen and Pelvis Routine With IV Contrast</b>	
<b>Localizer(s)</b>	<b>Frontal, Lateral if Required</b>
<b>Scan Series</b>	<b>Abdomen and Pelvis</b>
<b>Scan Phase</b>	Portal venous
<b>Instructions</b>	Inspiration
<b>Contrast Agent</b>	300, 350, or 370
<b>Volume and Rate</b>	80ml(370) - 100ml(300)/3.0-3.5ml per sec
<b>Contrast Delay</b>	80 sec
<b>Start</b>	Above diaphragms
<b>End</b>	Below symphysis pubis
<b>Scan Type</b>	Helical
<b>kVp</b>	100-130
<b>Target CTDIvol</b>	<15 mGy
<b>Max CTDIvol</b>	25 mGy
<b>Max Scan Time</b>	26 sec
<b>Pitch</b>	0.9-1.75:1
<b>DFOV</b>	To body wall
<b>Send to PACS</b>	AX 1x1 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**

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