AmeriHealth Caritas Louisiana

National Imaging Associates, Inc.	
Clinical guidelines **PELVIS CTA (Angiography)**	**Original Date: July 2008**
CPT Codes: 72191	**Last Revised Date: ~~April 2022~~March 2023**
Guideline Number: NIA_CG_038	**Implementation Date: January 202~~3~~4**

GENERAL INFORMATION

- *It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.*
- ***Where a specific clinical indication is not directly addressed in this guideline, medical necessity determination will be made based on widely accepted standard of care criteria. These criteria are supported by evidence-based or peer-reviewed sources such as medical literature, societal guidelines and state/national recommendations.***

INDICATIONS FOR PELVIS CT Angiography / CT Venography (CTA/CTV)

IMPORTANT NOTE~~ when~~

When vascular imaging of the aorta and both legs, i.e., CTA aortogram and runoff is desired (sometimes incorrectly requested as Abd/Pelvis CTA & Lower Extremity CTA Runoff), only one authorization request is required, using CPT Code 75635 Abdominal Arteries CTA. This study provides for imaging of the abdomen~~ and~~, pelvis~~ are involved (or suspected~~**, and both legs. The CPT code description is CTA aorto-iliofemoral runoff; abdominal aorta and bilateral ilio-femoral lower extremity runoff.**

When separate requests for CTA abdomen and CTA Pelvis are encountered for processes involving both the abdomen and pelvis (but do NOT need to ~~be), should be ordered as~~ include legs/runoff), they need to be resubmitted as a single Abdomen/Pelvis CTA~~ (CPT Code: 74174)~~,

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using CPT Code 74174 (to avoid unbundling). Otherwise, the exam should be limited to the appropriate area (i.e., Abdomen OR Pelvis) that includes the area of concern.

~~**For evaluation of known or suspected vascular disease**[1]~~
~~For pelvic extent~~
Evaluation of known or suspected pelvic vascular disease
Abdominal Aortic Aneurysm (AAA) (needs to be resubmitted as CTA Abdomen and Pelvis unless there is a specific finding limited to the pelvis)

Other vascular abnormalities seen on prior imaging studies limited to the pelvis:

- **Initial evaluation of inconclusive vascular findings on prior imaging**
- **Follow-up** of known ~~large vessel diseases (abdominal aorta, inferior vena cava, superior/inferior mesenteric, celiac, splenic, renal or iliac arteries/veins), e.g.,~~ **visceral vascular conditions in the pelvis (such as** aneurysm, dissection, **compression** syndromes, arteriovenous malformations (AVMs), fistulas, intramural hematoma, and vasculitis**)**

~~- Evidence of vascular abnormality seen on prior imaging studies~~
~~- For suspected pelvic extent of aortic dissection~~
~~- Evaluation of known or suspected aneurysms limited to the pelvis or in evaluating pelvic extent of aortic aneurysm[2-4]~~
  ~~- Known or suspected iliac artery aneurysm **AND** equivocal or indeterminate Doppler ultrasound results~~
  ~~- If repeat Doppler ultrasound is indeterminate~~
- **Vascular invasion or displacement by tumor (conventional CT or MRI also appropriate)[1]**
- **For known iliac vascular disease, e.g., aneurysm, dissection, arteriovenous malformations (AVMs), and fistulas, intramural hematoma, and vasculitis[2-4] when ultrasound is inconclusive (See background for ultrasound screening intervals). CTA/MRA rather than CT/MRI is needed for non-aortic disease when ultrasound is inconclusive.[5]**
- Suspected complications of known aneurysm as evidenced by clinical findings such as new onset of pelvic pain

~~- Follow-up of iliac artery aneurysm:~~
  ~~- Every three years for diameter 2.0 – 2.9 cm~~
  ~~- Annually for 3.0-3.4 cm if Doppler ultrasound is inconclusive~~
  ~~- If > 3.5 cm, < six-month follow-up (and consider intervention)[4]~~
~~- Suspected retroperitoneal hematoma or hemorrhage: to determine vascular source of hemorrhage, in setting of trauma, tumor invasion, fistula or vasculitis, otherwise CT/MR abdomen and pelvis (rather than CTA/MRA) may be sufficient and the modality of choice for diagnosing hemorrhage[5]~~

Vascular ischemia or hemorrhage needs to be resubmitted as CTA Abdomen and Pelvis unless there is a specific finding limited to the pelvis)

For patients at increased risk for vascular abnormalities (CTA or MRA): (needs to be resubmitted as CTA Abdomen and Pelvis unless there is a specific finding limited to the pelvis)

Venous

- For evaluation of suspected pelvic vascular disease or pelvic congestive syndrome when findings on ultrasound are indeterminate (MR or CT venography **(CTV)** may be used as the initial study for pelvic thrombosis or thrombophlebitis)[6, 7]
- ~~For evaluation of venous thrombosis in the inferior vena cava~~[8]**For unexplained lower extremity edema (typically unilateral or asymmetric) with negative or inconclusive ultrasound**[8]
- **For evaluation of venous thrombosis in the inferior vena cava**[9]
- Venous thrombosis if previous studies have not resulted in a clear diagnosis[9]**10**
- Vascular invasion or displacement by tumor (Conventional CT or MRI also appropriate)[10], [11]

- ~~For evaluation of suspected mesenteric ischemia/ischemic colitis (can approve CTA/MRA abdomen and pelvis)~~[12]

~~**Other vascular indications**~~

- For suspected May-Thurner Syndrome (iliac vein compression syndrome) (can include abdomen CTA)[13, 14]**12, 13**

Other vascular indications

- ~~Lower gastrointestinal hemorrhage: Active bleeding in a hemodynamically stable patient or non-localized intermittent bleeding as an alternative to Tc-99m RBC scan when colonoscopy did not localize the bleeding, is contraindicated, or unavailable~~[15, 16]
  - For evaluation of erectile dysfunction when a vascular cause is suspected and Doppler ultrasound is inconclusive[17]**14**
- ~~For patients with fibromuscular dysplasia (FMD), a one-time vascular study of the abdomen and pelvis~~[18] ~~so should be Abdomen/Pelvis CTA (CPT 74174)~~
- ~~For patients with vascular Ehlers-Danlos syndrome or Marfan syndrome recommend a one-time vascular study of the abdomen and pelvis so should be Abdomen/Pelvis CTA (CPT 74174)~~
- ~~For Loeys-Dietz vascular imaging every two years (include abdomen CTA)~~[19]
- ~~For spontaneous coronary artery dissection (SCAT) at time of coronary arteriography (includes CTA abdomen)~~[20] ~~so should be Abdomen/Pelvis CTA (CPT 74174)~~

~~**Pre-operative evaluation**~~[21, 22]

Other Indications

Further evaluation of indeterminate findings on prior imaging (unless follow up is otherwise specified within the guideline):

- **For initial evaluation of an inconclusive finding on a prior imaging report that requires further clarification**
- **One follow-up exam of a prior indeterminate MR/CT finding to ensure no suspicious interval change has occurred. (No further surveillance unless specified as highly suspicious or change was found on last follow-up exam)**

Pre-operative evaluation[15, 16]

- Evaluation of interventional vascular procedures prior to endovascular aneurysm repair (EVAR), or for luminal patency versus restenosis due to conditions such as atherosclerosis, thromboembolism, and intimal hyperplasia

~~- Imaging of the deep inferior epigastric arteries for surgical planning (breast reconstruction surgery) include abdomen CTA/MRA[22]~~

~~- Prior to uterine artery embolization for fibroids (MRA preferred)[23]~~

- **Imaging of the deep inferior epigastric arteries for surgical planning (breast reconstruction surgery), if abdomen CTA is also needed, resubmit as abdomen and pelvis CTA[16]**
- **Prior to uterine artery embolization for fibroids (MRA preferred)[17]**
- **Prior to solid organ transplantation when vascular anatomy is needed**

Post-operative or post-procedural evaluation

- Evaluation of post-operative complications of renal transplant allograft[24]**[18]**
- Evaluation of endovascular/interventional vascular procedures for luminal patency versus restenosis due to conditions such as atherosclerosis, thromboembolism, and intimal hyperplasia
- Evaluation of post-operative complications, e.g., pseudoaneurysms related to surgical bypass grafts, vascular stents, and stent-grafts in the pelvis
- Follow-up for post-endovascular repair (EVAR) or open repair of abdominal aortic aneurysm (AAA~~) and iliac artery aneurysms typically needs to include abdominal imaging, therefore Abdomen Pelvis CTA would usually be the appropriate study~~)**[5] or abdominal extent of iliac artery aneurysms. CT preferred unless MRA/CTA is needed for procedural planning or to evaluate complex anatomy.(Needs to be resubmitted as CTA Abdomen and Pelvis unless there is a specific finding limited to the pelvis)**

When Pelvis CTA is requested in combination with Chest CTA ~~and~~ , the Pelvis CTA needs to be resubmitted as an Abdomen/Pelvis CTA ~~or~~(see Abdomen/Pelvis CTA **Guidelines for approvable** combo **indications)**

~~- For evaluation of extensive vascular disease involving the chest and abdominal cavities~~

- ~~For preoperative or preprocedural evaluation, such as TAVR (transcatheter aortic valve replacement) or transcatheter venous ablation[21, 25]~~
- ~~Acute aortic dissection[26]~~
- ~~Takayasu's arteritis[27]~~
- ~~Marfan syndrome~~
- ~~Loeys-Dietz syndrome~~
- ~~Spontaneous coronary artery dissection (SCAD)~~
- ~~Vascular Ehlers-Danlos syndrome~~
- ~~Post-operative complications[28, 29]~~
- ~~Significant post-traumatic or post-procedural vascular complications~~

~~**IMPORTANT NOTE: When encountering requests for Abd/Pelvis CTA & Lower Extremity CTA (Runoff) requests, these should be Abdominal Arteries CTA. Only one authorization request is required, using CPT Code 75635. This study provides for imaging of the abdomen, pelvis, and both legs and is the noninvasive equivalent to an "aortogram and run-off".**~~

BACKGROUND

Computed tomographic angiography (CTA) is used in the evaluation of many conditions affecting the veins and arteries of the pelvis or lower extremities. It is not appropriate as a screening tool for asymptomatic patients without a previous diagnosis.

OVERVIEW

CT/MRI and acute hemorrhage: MRI is not indicated ~~and~~**.** MRA/MRV ~~(MR Angiography/Venography)~~ is rarely indicated for evaluation of intraperitoneal or retroperitoneal hemorrhage, particularly in the acute setting.

CT is the study of choice due to its availability, speed of the study and less susceptibility to artifact from patient motion. Advances in technology have allowed conventional CT to not just detect hematomas but **to** also **identify** the source of acute vascular extravasation. In special cases, finer vascular detail to assess the specific ~~source~~ vessel responsible for hemorrhage may require the use of CTA. CTA in diagnosis of lower gastrointestinal bleeding is such an example.~~15~~[19]

MRA/MRV ~~is often~~**can be** utilized in non-acute situations to assess vascular structure involved in atherosclerotic disease and its complications, **such as** vasculitis, venous thrombosis, vascular congestion, or tumor invasion. Although some of these conditions may be associated with hemorrhage, ~~it~~**bleeding** is usually not the primary reason why MRI/MRA/MRV is selected for the evaluation. A special condition where MRI may be superior to CT for evaluating hemorrhage is to detect an underlying neoplasm as the cause of bleeding.~~30~~[20]

Follow-up of asymptomatic, incidentally detected iliac artery aneurysms: The definition of an iliac artery aneurysm (IAA) is dilatation to more than 1.5 times its normal diameter; in general, a common iliac artery ≥ 18 mm in men and ≥ 15 mm in women; an internal iliac artery (IIA) > 8 mm is considered aneurysmal. ~~Four types of isolated iliac aneurysms are classified by Reber. Suggested surveillance is extrapolated from AAA surveillance and can be done by Doppler ultrasound or CTA if hard to visualize by ultrasound.[4, 31]~~

Iliac aneurysm ultrasound screening intervals:

- **Aneurysm size 2.0 -2.9 cm, every 3 years**
- **Aneurysm size 3.0-3.4 cm, annually**
- **Aneurysm size > 3.5 cm, every 6 months[5]**

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POLICY HISTORY

Date	Summary
March 2023	• Redirected vascular requests for abdomen alone or pelvis imaging alone to resubmit as abdomen and pelvis CTA required unless condition limited to pelvis • Other vascular abnormalities: clarified indication for non-aortic vascular conditions • Transplant: added section • General Information moved to beginning of guideline with added statement on clinical indications not addressed in this guideline • Added statement regarding further evaluation of indeterminate findings on prior imaging • Aligned sections across body imaging guidelines
April 2022	• Removed follow-up intervals for EVAR and AAA since Abdomen Pelvis CTA is usually appropriate study
~~April 2021~~	~~• No substantial changes~~
~~May 2020~~	~~• Added important note for runoff requests and authorizations~~ ~~• Added note that abdominal CTA can be added when indicated~~ ~~• Removed iliac artery aneurysm size restriction of >2.5cm in diameter and changed to 'if repeat Doppler US is indeterminate~~ ~~• For retroperitoneal hematoma or hemorrhage, specified 'when an underlying neoplasm is suspected and prior imaging is inconclusive'~~ ~~• Added pelvic congestive syndrome; suspected May-Thurner Syndrome; erectile dysfunction when vascular cause is suspected and Doppler US inconclusive; post-operative complications of renal transplant allograft~~ ~~• Modified combo study from 'Chest CTA/Pelvis CTA' to 'Chest CTA and Abdomen CTA or Abdomen/Pelvis CTA combo'~~ ~~• Updated background information and references~~
~~June 2019~~	~~• Added evaluation of FMD, Vascular Ehlers-Danlos syndrome, Loetz-Dietz and SCAD~~ ~~• Added uterine artery embolization~~ ~~• Added combo studies~~

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ADDITIONAL RESOURCES

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Reviewed / Approved by NIA Clinical Guideline Committee

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~~**GENERAL INFORMATION**~~

~~*It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.*~~

~~**Disclaimer:** Magellan Healthcare service authorization policies do not constitute medical advice and are not intended to govern or otherwise influence the practice of medicine. These policies are not meant to supplant your normal procedures, evaluation, diagnosis, treatment and/or care plans for your patients. Your professional judgement must be exercised and followed in all respects with regard to the treatment and care of your patients. These policies apply to all Magellan Healthcare subsidiaries including, but not limited to, National Imaging Associates ("Magellan"). The policies constitute only the reimbursement and coverage guidelines of Magellan. Coverage for services varies for individual members in accordance with the terms and conditions of applicable Certificates of Coverage, Summary Plan Descriptions, or contracts with governing regulatory agencies. Magellan reserves the right to review and update the guidelines at its sole discretion. Notice of such changes, if necessary, shall be provided in accordance with the terms and conditions of provider agreements and any applicable laws or regulations.~~