Evolent Clinical Guideline 2006 for Abdominal Aorta Computed Tomography Angiography with Lower Extremity Runoff

Guideline Number: Evolent_CG_2006	**Applicable Codes**	
"Evolent" refers to Evolent Health LLC and Evolent Specialty Services, Inc. 		
Original Date: July 2008	**Last Revised Date:** July 2025	**Implementation Date:** January 2026

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STATEMENT

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.*
- *The guideline criteria in the following sections were developed utilizing evidence-based and peer-reviewed resources from medical publications and societal organization guidelines as well as from widely accepted standard of care, best practice recommendations.*

Purpose

Computed tomography angiography (CTA) generates images of the blood vessels in the abdomen and lower extremities that can be evaluated for evidence of stenosis or occlusion with the use of ionizing radiation, which is a potential hazard in patients with impaired renal function.

INDICATIONS

Peripheral Vascular Disease [1–4]

NOTE: When vascular imaging of the aorta and both legs is required,(sometimes incorrectly requested as Abd/Pelvis CTA & Lower Extremity CTA Runoff), only **ONE** authorization request is required, using CPT Code 75635 (CTA Abdominal Aorta with Lower Extremity Runoff). This study provides for imaging of the abdomen, pelvis, and both legs. A separate authorization for Lower Extremity CTA is **NOT** needed.

For evaluation of known or suspected lower extremity vascular disease:

- For known or suspected atherosclerotic peripheral arterial disease when any **ONE** of the following non-invasive studies are abnormal or indeterminate:
  - Ankle-brachial index (ABI) (< 0.9 is the cutoff for diagnosis of peripheral arterial disease and >1.4 is considered inconclusive)
  - Toe brachial index (< 0.7 is the cutoff for diagnosis of peripheral arterial disease)
  - Segmental pressure test (a pressure gradient > 20 mmHg is considered abnormal)
  - Doppler ultrasound

- Treadmill test
- 6-minute walking test

- For acute critical limb ischemia with any **ONE** of the below clinical signs of peripheral vascular disease:
  - Ischemic rest pain
  - Tissue loss
  - Gangrene

  NOTE: Prior ultrasound is **NOT** needed [1,2]

- After prior stenting or surgery (arterial and/or venous) with any **ONE** of the following:
  - Recurrent symptoms
  - Signs of recurrent disease on examination
  - Abnormal / indeterminate non-invasive testing or imaging (Such as, ankle brachial index (ABI), ultrasound)

PREOPERATIVE OR POSTOPERATIVE ASSESSMENT

When not otherwise specified in the guideline:

Preoperative Evaluation [5]:

- Evaluation of interventional vascular procedures for luminal patency versus restenosis due to conditions such as atherosclerosis, thromboembolism, and intimal hyperplasia
- Imaging of the area requested is needed to develop a surgical plan

Postoperative Evaluation [5]

- Known or suspected complications
- A clinical reasoning is provided how imaging may change management

NOTE: This section applies only within the first few months following surgery

FURTHER EVALUATION OF INDETERMINATE FINDINGS

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)

IMAGING IN KNOWN GENETIC CONDITIONS

- Williams Syndrome [6]:
  - Abnormal vascular exam or imaging findings (such as concern for renal artery stenosis, diminished pulses, bruits or signs of diffuse thoracic aortic stenosis)
- For other syndromes and rare diseases not otherwise addressed in the guideline, coverage is based on a case-by-case basis using societal guidance

Combination Studies for Known Genetic Conditions

NOTE: When medical necessity is met for an individual study **AND** conscious sedation is required (such as for young pediatric patients or patients with significant developmental delay), the entire combination is indicated)

Abdominal Aorta CTA with Lower Extremity Runoff / Chest CTA

- Williams Syndrome: Abnormal vascular exam or imaging findings (such as concern for renal artery stenosis, diminished pulses, bruits or signs of diffuse thoracic aortic stenosis [6]

OTHER COMBINATIONS STUDIES WITH ABDOMINAL AORTA CTA WITH LOWER EXTREMITY RUNOFF

NOTE: When medical necessity is met for an individual study **AND** conscious sedation is required (such as for young pediatric patients or patients with significant developmental delay), the entire combination is indicated)

Abdominal Aorta CTA with Lower Extremity Runoff and Chest CTA

- To evaluate for an embolic source of lower extremity thromboembolic vascular disease

NOTE: Echocardiogram is also indicated as the heart is the most commonly reported source of lower extremity emboli

CODING AND STANDARDS

Codes

75635

Applicable Lines of Business

☒	CHIP (Children's Health Insurance Program)
☒	Commercial
☒	Exchange/Marketplace
☒	Medicaid
☒	Medicare Advantage

BACKGROUND

Contraindications and Preferred Studies

- Contraindications and reasons why a CT/CTA cannot be performed may include: impaired renal function, significant allergy to IV contrast, pregnancy (depending on trimester)
- Contraindications and reasons why an MRI/MRA cannot be performed may include: impaired renal function, claustrophobia, non-MRI compatible devices (such as non-compatible defibrillator or pacemaker), metallic fragments in a high-risk location, patient exceeds weight limit/dimensions of MRI machine

SUMMARY OF EVIDENCE

ACR Appropriateness Criteria® Lower Extremity Arterial Claudication-Imaging Assessment for Revascularization: 2022 Update [(1)]

Study Design: This document is an update on the ACR Appropriateness Criteria for imaging assessment in lower extremity arterial claudication, focusing on revascularization. It is based on evidence-based guidelines reviewed annually by a multidisciplinary expert panel.

Target Population: The target population includes patients with arterial claudication, a common manifestation of peripheral artery disease (PAD), which affects 3% to 7% of the general population and 20% of people over 70 years of age.

Key Factors: The document discusses the appropriate use of ultrasound, invasive arteriography, MR angiography, and CT angiography for diagnosing and treating claudication. Claudication prevalence ranges from 1.6% to almost 8%, depending on various factors. Noninvasive hemodynamic tests like the ankle-brachial index are essential for diagnosis. The document emphasizes the importance of imaging in diagnosing individual lesions and triaging patients for possible percutaneous or surgical intervention.

Society for Vascular Surgery practice guidelines for atherosclerotic occlusive disease of the lower extremities: Management of asymptomatic disease and claudication [2]

Study Design: This document provides practice guidelines for managing atherosclerotic occlusive disease of the lower extremities, focusing on asymptomatic disease and claudication. The guidelines were developed by the Society for Vascular Surgery Lower Extremity Guidelines Writing Group.

Target Population: The target population includes patients with peripheral arterial disease (PAD), which affects an estimated 8 to 12 million Americans. The prevalence of PAD increases with age, smoking, diabetes, hypertension, and obesity.

Key Factors: The document highlights the association between PAD and risk factors such as age, smoking, diabetes, hypertension, and hypercholesterolemia. The ankle-brachial index (ABI) is recommended as the first-line noninvasive test to diagnose PAD. Routine screening for PAD in asymptomatic individuals is not recommended. Emphasis is placed on risk factor modification, medical therapies, and exercise programs to improve cardiovascular health and functional performance. Revascularization for intermittent claudication (IC) is appropriate for selected patients with disabling symptoms. The guidelines recommend multidisciplinary smoking cessation interventions, statin therapy, optimizing diabetes control, and antiplatelet therapy for patients with IC.

ANALYSIS OF EVIDENCE

Analysis [1,2]:

In summary, both articles provide valuable insights into the use of CTA for imaging the abdominal aorta and lower extremities. They agree on the high accuracy and utility of CTA, its advantages over other imaging modalities, and its ability to detect nonvascular findings. However, they differ in their focus on technical considerations, clinical guidelines, and radiation exposure. By integrating the findings from both articles, healthcare providers can make more informed decisions about the use of CTA in the management of PAD.

Shared Findings

Both articles emphasize the importance of CTA (Computed Tomography Angiography) in the imaging and assessment of peripheral arterial disease (PAD), particularly for the abdominal aorta and lower extremities. They agree on several key points:

- Both articles highlight the high sensitivity and specificity of CTA for detecting stenoses greater than 50% in diameter. CTA is praised for its ability to provide volumetric images, which allow for extensive post-processing and the creation of arterial road maps.
- CTA is considered superior to catheter angiography for imaging the aorta and iliac arteries. It can readily detect stenosis caused by plaque or thrombus and is more clinically useful than duplex ultrasound (US) for assessing bypass grafts.
- Both articles note that CTA, like MRA (Magnetic Resonance Angiography), is a cross-sectional technique that can show nonvascular findings, such as aneurysms and cystic adventitial disease, which are not detected with catheter arteriography.

POLICY HISTORY

Date	Summary
July 2025	• Added a Summary of Evidence and Analysis of Evidence • Last revised date adjusted to July • Removed “on prior imaging” under further evaluation to align with guidelines
June 2025	• This guideline number changed from 035 to 2006 • Added in general information statement regarding guideline criteria development by reputable sources, standard of care, and best practices • Updated language in the preoperative and postoperative section • Segment added to the combinations studies about if the required use of conscious sedation is needed the entire combination is indicated • Reduced background section
June 2024	• Updated references • Added Combo studies, Genetic Syndromes and Rare Diseases, Contraindications and Preferred Studies sections • Updated guideline name

LEGAL AND COMPLIANCE

Guideline Approval

Committee

Reviewed / Approved by Evolent Specialty Services Clinical Guideline Review Committee

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Evolent Clinical Guidelines are comprehensive and inclusive of various procedural applications for each service type. Our guidelines may be used to supplement Medicare criteria when such criteria is not fully established. When Medicare criteria is determined to not be fully established, we only reference the relevant portion of the corresponding Evolent Clinical Guideline that is applicable to the specific service or item requested in order to determine medical necessity.

REFERENCES

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