

04-70450-06

Original Effective Date: 11/15/13

Reviewed: 03/27/25

Revised: 04/15/25

Subject: Computed Tomography Angiography (CTA) Neck

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

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DESCRIPTION:

Computed tomography angiography (CTA) is an imaging procedure performed for characterizing vascular anatomy, diagnosing vascular diseases, planning treatment for vascular disease and assessing the effectiveness of vascular treatment. CTA may be performed with or without contrast material.

Summary and Analysis of Evidence: Cervicocerebral computed tomography angiography (CTA) is a proven and useful procedure for the detection and characterization of vascular diseases and of vascular anatomy relevant to the treatment of extravascular disorders. CTA may be used as the primary modality for detecting disease or as an adjunctive tool for characterizing known disease or assessing changes over time. CTA is primarily performed to assess the heart, arteries, or veins. (ASNR-SPR, 2020) Non-invasive cross-sectional imaging techniques play a crucial role in the assessment of the vascular disease processes. Computed tomography angiography (CTA) is an imaging method of choice for a wide range of vascular diseases that span across different vascular territories (Baliyan, et al., 2019).

POSITION STATEMENT:

Documentation Requirements

Documentation containing the medical necessity of the computed tomography angiography (CTA) of the neck and imaging results (e.g., images, clinical reports) should be maintained in the member's medical record. Documentation may be requested as part of the review process.

Computed tomography angiography (CTA) of the neck **meets the definition of medical necessity** for the following indications:

Evaluation of known or suspected extracranial vascular disease

Cerebrovascular disease

- Ischemic stroke or transient ischemic attack.
- Known or suspected vertebrobasilar insufficiency (VBI) in members with symptoms.
- Asymptomatic members with an abnormal ultrasound of the neck or carotid duplex imaging.
- Symptomatic members with an abnormal ultrasound of the neck or carotid duplex imaging.

Aneurysm screening

- Loeys-Dietz syndrome (Note: Imaging for Loeys-Dietz syndrome may be repeated at least every two years)
- Fibromuscular dysplasia
- Spontaneous coronary arteries dissection (SCAD)
- Known aortic coarctation.

Tumor/pulsatile mass

- Pulsatile mass
- Carotid body tumors or other masses

Other extracranial vascular disease

- Takayasu arteritis
- Giant cell arteritis
- Subclavian steal syndrome when ultrasound is positive or indeterminate or for planning interventions.
- Suspected carotid or vertebral artery dissection.
- Horner's syndrome
- Evaluation of pulsatile tinnitus for vascular etiology.
- Known extracranial vascular disease that needs follow-up or further evaluation.

Pre-operative evaluation

- Pre-operative evaluation for a planned surgery or procedure.

Post-operative/procedural evaluation

- A follow-up study may be needed to help evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation required.

BILLING/CODING INFORMATION:

CPT Coding:

70498	Computed tomographic angiography, neck, with contrast material(s), including noncontrast images, if performed, and image post-processing
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REIMBURSEMENT INFORMATION:

Refer to section entitled [POSITION STATEMENT](#).

Re-imaging or additional imaging due to poor contrast enhanced exam or technically limited exam is the responsibility of the imaging provider.

LOINC Codes:

The following information may be required documentation to support medical necessity: physician history and physical, physician progress notes, plan of treatment and reason for computed tomography angiography (CTA) of the neck.

Documentation Table	LOINC Codes	LOINC Time Frame Modifier Code	LOINC Time Frame Modifier Codes Narrative
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Attending physician progress note	18741-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Plan of treatment	18776-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology reason for study	18785-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology comparison study-date and time	18779-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology comparison study observation	18834-2	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim

Radiology-study observation	18782-3	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology-impression	19005-8	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology study-recommendation (narrative)	18783-1	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim

PROGRAM EXCEPTIONS:

Federal Employee Plan (FEP): Follow FEP guidelines.

Medicare Advantage products: No Local Coverage Determination (LCD) was found found at the time of the last guideline reviewed date.

The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Computed Tomography (220.1), located at [cms.gov](https://www.cms.gov).

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at [Coverage Protocol Exemption Request](#).

DEFINITIONS:

No guideline specific definitions apply.

RELATED GUIDELINES:

[Computed Tomography Angiography \(CTA\) Abdomen and Pelvis, 04-70450-04](#)

[Computed Tomography Angiography \(CTA\) Brain \(Head\), 04-70450-05](#)

[Computed Tomography Angiography \(CTA\) Chest \(non coronary\), 04-70450-07](#)

[Computed Tomography Angiography \(CTA\) Upper Extremity, 04-70450-08](#)

[Computed Tomography Angiography \(CTA\) Lower Extremity, 04-70450-09](#)

OTHER:

None applicable.

REFERENCES:

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3. ACR–ASNR Practice Guideline for the Performance and Interpretation of Cervicocerebral Computed Tomography Angiography (CTA), 2020.
4. American College of Radiology ACR Appropriateness Criteria®: Cerebrovascular Disease, Last review date: 2016.
5. American College of Radiology ACR Appropriateness Criteria®: Head Trauma, Last review date: 2015.
6. American College of Radiology ACR Appropriateness Criteria®: Suspected Spine Trauma, 2018.
7. Baliyan V, Shaqdan K, Hedgire S, et al. Vascular computed tomography angiography technique and indications. *Cardiovasc Diagn Ther*. 2019 Aug;9(Suppl 1):S14-S27.
8. Brott TG, Halperin JL, Abbara S, et al. ASA / ACCF / AHA / AANN / AANS / ACR / ASNR / CNS / SAIP / SCAI / SIR / SNIS / SVM / SVS guideline on the management of patients with extracranial carotid and vertebral artery disease: Executive summary. *Circulation*. 2011; 124:489-532.
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13. Lima Neto AC, Bittar R, Gattas GS et al. Pathophysiology and Diagnosis of Vertebrobasilar Insufficiency: A Review of the Literature. *Int Arch Otorhinolaryngol* 2017;21(3):302-307.
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15. Pegge SAH, Steens SCA, Kunst HPM et al. Pulsatile tinnitus: differential diagnosis and radiological work-Up. *Curr Radiol Rep*. 2017;5(1):5.
16. Potter BJ, Pinto DS. Subclavin steal syndrome. *Circulation* 2014; 129: 2320-2323.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 03/27/25.

GUIDELINE UPDATE INFORMATION:

11/15/13	New Medical Coverage Guideline.
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01/01/14	Review/revision; added for evaluation of head trauma in a member with closed head injury for suspected carotid or vertebral artery dissection.
06/15/15	Updated related guidelines.
04/15/18	Revision; revised position statement. Updated references.
03/15/21	Review/revision. Updated description. Revised and expanded indications and criteria for known or suspected extracranial vascular disease. Revised and expanded criteria for combination studies: neck CTA/brain CTA. Updated references.
05/15/22	Review/revision. Expanded criteria for: cerebrovascular disease, tumor/pulsatile mass, other extracranial vascular disease, pre-operative evaluation and combination studies. Revised criteria for aneurysm screening. Revised and expanded criteria for combination studies. Updated references.
07/01/22	Revision to Program Exceptions section.
08/21/23	Update to Program Exceptions section.
12/09/23	Review: position statements and references updated.
04/15/24	Review; maintain position statements. Updated program exception and references.
04/15/25	Review; maintain position statements.