

04-70540-19

Original Effective Date: 11/15/13

Reviewed: 03/23/23

Revised: 09/30/23

Subject: Magnetic Resonance Angiography (MRA) 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:

Magnetic resonance angiography (MRA) is a noninvasive imaging technology used for the evaluation and imaging of vessels in the head and neck. MRA may be performed after abnormal results are found on carotid duplex imaging. A contrast agent (gadolinium) may be used to enable visualization of a body system or body structure and may be used in individuals who have a history of contrast allergy and who are at high risk of kidney failure.

POSITION STATEMENT:

Documentation Requirements

Documentation containing the medical necessity of the magnetic resonance angiography (MRA) 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.

Magnetic resonance angiography (MRA) of the neck **meets the definition of medical necessity** for the following indications:

Evaluation of known or suspected extracranial vascular disease

Cerebrovascular disease

- Recent 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 with the following:
 - Carotid stenosis must be at least 70%
- Symptomatic members with an abnormal ultrasound of the neck or carotid duplex imaging with the following:
 - Carotid stenosis must be at least 50%

Aneurysm screening

- Loeys-Dietz syndrome(Loeys-Dietz imaging should be repeated at least every two years)
- Fibromuscular dysplasia
- Spontaneous coronary arteries dissection (SCAD).

Tumor/pulsatile mass

Other extracranial vascular disease

- Takayasu arteritis based on findings in other blood vessels on previous imaging
- Giant cell arteritis with suspected extracranial involvement
- Subclavian steal syndrome when ultrasound is positive or indeterminate **OR** for planning an intervention
- Suspected carotid or vertebral artery dissection; due to trauma or spontaneous due to weakness of vessel wall
- Horner's syndrome
- For evaluation of pulsatile tinnitus for vascular etiology
- Known extracranial vascular disease that needs follow-up or further evaluation.

Pre-operative evaluation

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:

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|-------|--|
| 70547 | Magnetic resonance angiography, neck; without contrast material(s) |
| 70548 | Magnetic resonance angiography, neck; with contrast material(s) |
| 70549 | Magnetic resonance angiography, neck; without contrast material(s), followed by contrast material(s) and further sequences |

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 magnetic resonance angiography (MRA) 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 |

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|--|---------|---------|---|
| 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

The following Local Coverage Determination (LCD) was reviewed: Magnetic Resonance Angiography (MRA), (L34372) located at fcso.com.

The following National Coverage Determination (NCD) was reviewed: Magnetic Resonance Angiography, (220.3) and Magnetic Resonance Imaging (MRI), (220.2) located at cms.gov.

DEFINITIONS:

None applicable.

RELATED GUIDELINES:

[Magnetic Resonance Angiography \(MRA\) Abdomen and Pelvis, 04-70540-21](#)

[Magnetic Resonance Angiography \(MRA\) Brain \(Head\), 04-70540-18](#)

[Magnetic Resonance Angiography \(MRA\) Chest, 04-70540-20](#)

[Magnetic Resonance Angiography \(MRA\) Extremity \(Upper and Lower, 04-70540-22](#)

[Magnetic Resonance Angiography \(MRA\) Spinal Canal, 04-70540-23](#)

OTHER:

None applicable.

REFERENCES:

1. ACR-NASCI-SPR Practice Guideline for the Performance of Cervicocerebral Magnetic Resonance Angiography (MRA), Revised 2015.
2. American College of Radiology ACR Appropriateness Criteria®: Cerebrovascular Disease, Last review date: 2016.
3. American College of Radiology ACR Appropriateness Criteria®: Head Trauma, Last review date: 2015.

4. American College of Radiology ACR Appropriateness Criteria® Suspected Spine Trauma, Last review date: 2012.
5. American College of Radiology ACR Appropriateness Criteria®: Neck Mass/Adenopathy, Last review date: 2012.
6. Arslan H, Unal O, Kutluhan A et al, Power Doppler scanning in the diagnosis of carotid body tumors. Journal of Ultrasound in Medicine 2000; 9(6):367-370.
7. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) Magnetic Resonance Angiography (220.3); accessed at cms.gov.
8. Centers for Medicare & Medicaid Services. National Coverage Determination (NCD) Magnetic Resonance Imaging (220.2); accessed at cms.gov.
9. First Coast Service Options, Inc. Local Coverage Determination (LCD) Magnetic Resonance Angiography (MRA) (L34372); accessed at fcso.com.
10. Van den Berg R, Verbist BM, Mertens BJ et al, Head and neck paragangliomas: improved tumor detection using contrast-enhanced 3D time-of-flight MR angiography as compared with fat-suppressed MR imaging techniques. American Journal of Neuroradiology 2004; 25(5):863- 870.
11. 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 03/23/23.

GUIDELINE UPDATE INFORMATION:

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| 11/15/13 | New Medical Coverage Guideline. |
| 04/15/15 | Annual review. Revised description and indication for pre-operative evaluation (brain/skull). Added indications for combination studies (Neck/Brain MRA and Neck MRA/Brain MRI). Updated references. |
| 08/15/18 | Revision; revised position statement. Updated references. |
| 03/15/20 | Review/revision. Expanded criteria for: vascular disease, suspected tumor mass and neck/brain MRA. Updated references. |
| 05/15/22 | Review: Position statements and references updated. |
| 07/01/22 | Revision to Program Exceptions section. |
| 09/30/23 | Review: position statements and references updated. |