

04-70540-22

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Subject: Magnetic Resonance Angiography (MRA) Extremity (Upper and Lower)

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 alternative to catheter angiography for evaluation of vascular structures in the upper extremity and for imaging arterial obstructive disease in the lower extremity. In the upper extremity, magnetic resonance venography (MRV) may be used to image veins instead of arteries. MRA and MRV are less invasive than conventional x-ray digital subtraction angiography. In the lower extremity, MRA may be used to image tibia and pedal arteries and evaluate symptoms that occur after angiography. A contrast material (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 extremity (upper and lower) 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.

Upper Extremity

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

Assessment/evaluation of known or suspected vascular disease/condition

- Evaluation of suspected vascular disease aneurysm, arteriovenous malformation, fistula, vasculitis, or intramural hematoma.
- Evaluation of Raynaud's syndrome.
- Evaluation of vascular invasion or displacement by tumor
- Evaluation of complications of interventional vascular procedures (e.g., pseudoaneurysms related to surgical bypass grafts, vascular stents, stent-grafts).
- Evaluation of suspected upper extremity embolism or venous thrombosis. Evaluation of traumatic injuries to the upper extremity with clinical findings suggestive of arterial injury.

Preoperative evaluation

- Preoperative evaluation of known vascular disease/condition.

Post-operative/ procedural evaluation

- A follow-up study may be needed to evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed for the type and areas(s) requested

Lower Extremity

Magnetic resonance angiography (MRA) of the lower extremity meets the definition of medical necessity for the following:

Assessment/evaluation of suspected or known vascular disease/condition

- Significant ischemia in the presence of ulcers/gangrene.
- Large vessel diseases (e.g., aneurysm, dissection, arteriovenous malformations (AVMs), and fistulas, intramural hematoma, and vasculitis).
- Arterial entrapment syndrome (e.g. peripheral artery disease (PAD)).
- Venous thrombosis after non-diagnostic ultrasound.
- Vascular invasion or displacement by tumor.
- Pelvic vein thrombosis or thrombophlebitis.
- Abnormal preliminary testing (ankle/brachial index, ultrasound/doppler arterial evaluation) associated with significant symptoms of claudication with exercise.
- Evaluation of traumatic injuries to the upper extremity with clinical findings suggestive of arterial injury.

Pre-operative evaluation

- Pre-operative evaluation of known vascular disease/condition.

Post-operative/procedural evaluation

- Post-operative or interventional vascular procedure for luminal patency versus re-stenosis (due to atherosclerosis, thromboembolism, intimal hyperplasia and other causes) as well as complications such as pseudoaneurysms related to surgical bypass grafts and vascular stents and stent-grafts
- A follow-up study may be needed to help evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation requires a medical reason that clearly indicates why additional imaging is needed for the type and area(s) requested.

BILLING/CODING INFORMATION:

CPT Coding:

73225	Magnetic resonance angiography, upper extremity, with or without contrast material(s)
73725	Magnetic resonance angiography, lower extremity, with or without contrast material(s)

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 extremity (upper and lower).

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	18785-6	18805-2	Include all data of the selected type that

study			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:

Coverage for the radiology services referenced in this guideline performed and billed in an outpatient or office location will be handled through the BCBSF Radiology Management program for select products. The National Imaging Associates (NIA) will determine coverage for these services for select products. Refer to the member's contract benefits.

Federal Employee Plan (FEP): FEP is excluded from the National Imaging Associates (NIA) review; follow FEP guidelines.

Medicare Advantage products

The following Local Coverage Determination (LCD) was reviewed: Magnetic Resonance Angiography (MRA), (L29218 and L34372) located at fcsso.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:

No guideline specific definitions apply.

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 \(MRA\) Neck, 04-70540-19](#)

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

OTHER:

None applicable.

REFERENCES:

1. American College of Radiology ACR Appropriateness Criteria®: Chronic Elbow Pain, Last review date: 2015.
2. American College of Radiology ACR Appropriateness Criteria®: Claudication -Suspected Vascular Etiology, 2012.
3. American College of Radiology ACR Appropriateness Criteria®: Follow-up of Lower-Extremity Arterial Bypass Surgery, 2013.
4. American College of Radiology ACR Appropriateness Criteria®: Recurrent Symptoms Following Lower-Extremity Angioplasty, 2012.
5. American College of Radiology ACR Appropriateness Criteria®: Suspected Upper Extremity Deep Vein Thrombosis, 2011.
6. American College of Radiology ACR Appropriateness Criteria®: Upper Extremity Swelling, 2014.
7. ACR-NASCI-SPR Practice Guideline for the Performance of Body Magnetic Resonance Angiography (MRA), Revised 2015.
8. Bezooijen R, van den Bosch HCM, Tiebeek AV et al. Peripheral arterial disease: sensitivity - encoded multiposition MR angiography compared with intraarterial angiography and conventional multiposition MR angiography. *Radiology* 2004; 231(1): 263-271.
9. Bilecen D, Aschwanden M, Heidecker HG et al. Optimized assessment of hand vascularization on contrast-enhanced MR angiography with a subsystolic continuous compression technique. *American Journal of Radiology* 2004; 182(1): 180-182.
10. Karcaaltincaba M, Akata D, Aydingoz U et al. Three-dimensional MDCT angiography of the extremities: clinical applications with emphasis on musculoskeletal uses. *American Journal of Radiology* 2004; 183(1): 113-117.
11. National Imaging Associates, Inc. MR Angiography Upper Extremity, 2018.
12. National Imaging Associates, Inc. MR Angiography Lower Extremity, 2018.
13. Zhang, H.L., Khilnani, N.M., Prince, M.R., et al. Diagnostic accuracy of time-resolved 2D projection MR angiography for symptomatic infrapopliteal arterial occlusive disease. *American Journal of Radiology* 2005; 184(3): 938-947.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy & Coverage Committee on 07/26/18.

GUIDELINE UPDATE INFORMATION:

12/15/13	New Medical Coverage Guideline.
04/15/15	Annual review. Revised description and position statement. Updated references.
08/15/18	Revision; revised position statement. Updated references.