

Subject: Lower Extremity MRA (73725)		Original Effective Date: 12/13/17
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DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

Magnetic Resonance Angiography (MRA) is a non- X-ray (no ionizing radiation) imaging scan that uses a strong magnetic field and radiofrequency waves to produce detailed images of vascular structures. MRA may be performed either without or with the injection of (gadolinium) contrast material into a vein. MRA images are electronically processed to remove surrounding non-vascular anatomy, so that only the arteries or veins of interest are displayed. These vascular images can be reconstructed and rotated in different planes. MRA can sometimes replace or can be used to supplement conventional invasive catheter angiography.

RECOMMENDATIONS

Duplex ultrasonography is the study of choice for initial evaluation and surveillance for many clinical scenarios involving the vasculature of the lower extremity and should be performed prior to MRA imaging.

Aneurysm

- For evaluation of a known or suspected aneurysm

Embolism or other occlusions

- For evaluation of suspected embolism or thrombus of the lower extremity
- For evaluation of known or suspected vasculitis (e.g. Takayasu's arteritis)

Fistula/AVM

- For evaluation of known or suspected arteriovenous malformation or fistula

Stenosis

- For evaluation of known or suspected peripheral vascular disease as identified on ankle/brachial index testing or arterial Doppler studies
- For popliteal artery entrapment

Differentiate between vascular and nonvascular tumors

Evaluate hemorrhage or trauma

- To evaluate the source of hemorrhage or vascular compromise due to trauma

Congenital

- To evaluate congenital disorders of the blood vessels involving the lower extremity

Pre/Post Procedural

- Pre-operative/ Pre procedural evaluation when blood vessel detail is needed.
- Post-operative/Post-procedural for routine recommended follow up or for potential post-operative complications.
- A repeat study may be needed to help evaluate a patient's progress after treatment procedure intervention or surgery. The reason for the repeat study and that it will affect care must be clear.

Abdomen MRA/Lower Extremity MRA Combination

- For evaluation of peripheral vascular disease as identified on ankle/brachial index testing or arterial Doppler studies and an "MRA runoff" study is needed

ADDITIONAL CRITICAL INFORMATION

The above medical necessity recommendations are used to determine the best diagnostic study based on a patient's specific clinical circumstances. The recommendations were developed using evidence based studies and current accepted clinical practices. Medical necessity will be determined using a combination of these recommendations as well as the patient's individual clinical or social circumstances.

- Tests that will not change treatment plans should not be recommended.
- Same or similar tests recently completed need a specific reason for repeat imaging.

REFERENCES USED FOR DETERMINATIONS

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