**MRA Head or Neck (MR Angiogram)**

**What is a MR Angiogram of the Head?**

MR imaging uses a powerful magnetic field, radio waves and a computer to produce detailed pictures of organs, soft tissues, bone and virtually all other internal body structures. MRI does not use radiation. MR angiography of the head and neck is used to examine the blood vessels in the head and carotid arteries.

**CPT Codes**

- 70544 Head Without Contrast (most common)
- 70545 Head With Contrast (rarely ordered)
- 70546 Head With and Without Contrast (rarely ordered)
- 70547 Neck Without Contrast (most common)
- 70548 Neck With Contrast (rarely ordered)
- 70549 Neck With and Without Contrast (rarely ordered)

**Indications**

Without Contrast: Neck pain, identify disease and evaluate aneurysms, dizziness, stroke, stenosis, bruits.

**Contraindications**

- Patients with cardiac pacemakers, ICD, or neurostimulators CANNOT have an MRI.
- Patients with pins, plates, screws and joint replacements can have an MRI, as long as it has been six weeks since placement of the device.
- Patients with stents and filters can have an MRI as long as it has been at least six to eight weeks since placement of the device.
- Women who are pregnant should avoid having an elective MRI. Women who are pregnant and need an MRI should be individually evaluated for risk vs. benefit, and should avoid an MRI in the 1st trimester of pregnancy.

**How Does The Patient Prepare?**

Patient should be NPO 6 - 8 hours prior to the exam.

For all contrast MRI’s:

- A current creatinine test (within 45 days) is needed on all patients over the age of 60, as well as patients that have high blood pressure, diabetes, acute vascular disease, or a history of kidney disease. The creatinine level is used to determine the patient’s renal risk ratio. This ratio determines which type of contrast, if any, is to be used.
- Please fax these results with the order.
- Patients will need to remove all jewelry, hairclips, ponytails, bobby pins and all clothing containing metal. This includes bras with metal enclosures, and jeans with metal zippers and buttons.
- The patient will be provided a gown and a secure locker in which valuables can be placed.
- For extreme cases of claustrophobia or pain, an oral sedative or IV conscious sedation is available.
- Patients that cannot complete an MRI study without IV conscious sedation will be risk evaluated on an individual basis by a radiologist.
- We require that a current physical and history has been performed within 30 days.
- Patients diagnosed with sleep apnea or who wear a CPAP while sleeping will not be candidates for conscious sedation. If conscious sedation is determined appropriate, we will contact you, request an order, and reschedule the patient’s MRI.
- A driver will be needed for patients receiving any type of sedation. Patients receiving conscious sedation should plan a three- to four-hour appointment time to include recovery.
**What Happens During the Test?**
The patient will be asked to lie face-up on the exam table. The table will then slide into the scanning area. During the test, the MRI will make a rapid tapping noise. Some MRI examinations may require an injection of contrast material into a vein in the arm. The patient’s experience and comfort are of key importance. Therefore, our patients are offered earplugs or a music headset; in addition, blankets are also available. The patient should relax and remain still during the exam. The patient should plan 60 minutes of total clinic time. The scan time can vary from 15-20 minutes, depending on the study. The patient may resume normal activities following the MRI.

**The Results**
A radiologist will analyze the images and send a signed report to the referring physician within one business day.

(Information adapted from www.radiologyinfo.org and Dr. Charles De Pena)

This information is intended for use as merely a guideline for referring physicians and their staff members only. It contains information pertaining to the most commonly ordered exams and indications. However, Shawnee Mission Medical Center Radiology does not recommend any particular examination. Individual radiologist preference or patient circumstances may dictate ordering alternative studies. Although contrast codes are not needed to place an order, the following contrast codes may be used in placing orders:
- CT Contrast Q9967, MRI contrast A9577 and A9579.