



**QUAKERBRIDGE**  
RADIOLOGY

**Location:**  The MRI Center at Lawrenceville  
21 Lawrenceville-Pennington Road  
Mercerville, NJ 08619  
(609) 895-1500  The Imaging Center  
8 Quakerbridge Plaza Drive  
Mercerville, NJ 08619  
(609) 890-0033

## CT Angiography (CTA)

### What is CT Angiography?

CT Angiography (CTA) is a radiological procedure that combines the technology of a conventional CT scan with that of traditional angiography to create detailed images of the blood vessels in the body.

CTA can assess the status of both the large arteries and veins in most parts of the body, including the brain. The test involves the use of x-rays which obtain multiple sectional images which are then reconstructed by a computer into 3-dimensional pictures.

### CTA is used to examine blood vessels in key areas of the body, including the:

- brain
- kidneys
- pelvis
- legs
- lungs
- heart
- neck
- abdomen

### Preparing for a CTA

1. You may be asked to wear a gown during the exam or you may be allowed to wear your own clothing if it is loose-fitting and has no metal fasteners.
2. You may be asked not to eat or drink anything for several hours beforehand, especially if a contrast material will be used in your exam. You should inform your physician of any medications you are taking and if you have any allergies. If you have a known allergy to contrast material, or "dye," your doctor may prescribe medications to reduce the risk of an allergic reaction. Also inform your doctor of any recent illnesses or other medical conditions, and if you have a history of heart disease, asthma, diabetes, kidney disease or thyroid problems. Any of these conditions may increase the risk of an unusual adverse effect.
3. Women should always inform their physician or technologist if there is any possibility that they are pregnant.
4. If you are breastfeeding at the time of the exam, you should ask your doctor how to proceed. It may help to pump breast milk ahead of time and keep it on hand for use after contrast material has cleared from your body, about 24 hours after the test.

### What to Expect During the Exam

The technologist begins by positioning you on the CT examination table, usually lying flat on your back or possibly on your side or on your stomach. Straps and pillows may be used to help you maintain the correct position and to hold still during the exam. A technologist will insert an intravenous (IV) line into a small vein in your arm or hand.

A small dose of contrast material may be injected through the IV to determine how long it takes to reach the area under study. During scanning, the table will then move to the start point and then move relatively rapidly through the gantry opening in the machine as the actual CT scanning is performed. You may be asked to hold your breath during the scanning. The CT scanning only takes between 5 and 20 seconds to acquire the appropriate images. Your actual time in the scanner room will be longer as the technologist will have to position you on the table, check or place an IV line, do preliminary imaging to verify the beginning and end points of the study, and enter the injection and acquisition sequence into a computer.

You will be alone in the exam room during the CT scan, however, the technologist will be able to see, hear and speak with you at all times. When the examination is completed, you will be asked to wait until the technologist verifies that the images are of high enough quality for accurate interpretation. Your intravenous line will be removed.

### What to Expect After the Exam

After your CTA is completed, you can return to your normal daily activities. You should be able to drive yourself home or to work.

### About Your Results

One of our board-certified radiologists will read the film, typically within 24 hours. Within 48 hours a report will be sent to the ordering physician, as well as any other physician you may have requested. If you need to pick up your results, you may do so from our medical records department.