

Subject: Abdomen CTA, (74175)		Original Effective Date: 12/13/17
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DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

Computed Tomographic Angiography (CTA) is an X-ray imaging scan in which iodine containing contrast material is injected into a vein to obtain detailed images of vascular structures. These images are electronically processed to remove surrounding non-vascular anatomy, so that only the arteries or veins of interest are displayed. The vascular images can be reconstructed and rotated in different planes. CTA can sometimes replace or can be used to supplement conventional invasive catheter angiography.

RECOMMENDATIONS

Duplex ultrasonography is frequently the study of choice for initial evaluation and surveillance for many clinical scenarios involving the vasculature of the abdomen.

Aneurysm/Dissection

- For evaluation of a known or suspected aneurysm and ultrasound was indeterminate
- For follow up evaluation of an aortic aneurysm and repair is being considered (generally aneurysms ≥ 5.5 cm)
- For evaluation of a known aneurysm and having new symptoms (E.g. pain)
- For evaluation of known or suspected dissection
- For follow up of an Endograft repair in the immediate post op period and for surveillance.

Embolism or other occlusions

- For evaluation of suspected embolism or thrombus of the abdomen (E.g. hepatic or renal vein thrombosis)
- 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 vascular disease
- For evaluation of ischemic colitis
- For evaluation of mesenteric ischemia/angina (ultrasound can be attempted)
- For evaluation of renovascular hypertension with any of the following: (ultrasound can be attempted)
 - Failure of three (3) or more anti-hypertensive medications at optimal dosing.
 - Acute elevation of creatinine after initiation of an angiotension converting enzyme inhibitor (ACE inhibitor) or angiotension receptor blocker (ARB).
 - Asymmetric kidney size noted on ultrasound.
 - Onset of hypertension in a person younger than age 30 without any other risk factors or family history of hypertension.
 - New onset of hypertension after age 55 (>160/100).
 - Acute rise in blood pressure in a person with previously stable blood pressures.
 - Flash pulmonary edema without identifiable causes.
 - Malignant hypertension.

Differentiate between vascular and nonvascular tumors

- To evaluate for vascular invasion or displacement by tumor

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 abdomen

Other

- For evaluation of a vascular abnormality seen on other imaging and additional clarification is required

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.

Combination

- Chest CTA and Abdomen CTA is appropriate for evaluation of an aortic dissection or aneurysm involving both the chest and abdominal cavities.

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.

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74175	CT (Computed Tomography) Angiography Abdomen without and with contrast)
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