Thoracic Aorta Interventional Planning and Follow-Up

Thoracic endovascular aortic repair (TEVAR) treats an aneurysm of the aorta with a procedure that is less invasive than open surgery. The aorta is the main artery from the heart, and an aneurysm refers to abnormal enlargement of an artery. In TEVAR, the physician uses a catheter-based system to treat the aneurysm by strengthening the wall and limiting growth of the weakened aorta wall.

Usually appropriate imaging before TEVAR includes CT angiography (CTA) ([https://www.radiologyinfo.org/en/info/angioct](https://www.radiologyinfo.org/en/info/angioct)) of the chest, abdomen, and pelvis to identify the extent and size of the aorta. These images allow physicians to decide on the best method to correct the aneurysm while minimizing complications.

MR angiography (MRA) ([https://www.radiologyinfo.org/en/info/angirom](https://www.radiologyinfo.org/en/info/angirom)) may be appropriate imaging as well, particularly MRA without contrast for individuals for whom contrast material should not be used. Ultrasound, echocardiography, radiography, and some nuclear medicine tests may also be appropriate to evaluate conditions related to the aneurysm.

After TEVAR, CTA is usually appropriate to make sure there are no complications. MRA may be appropriate, and in patients for whom contrast material should not be used, noncontrast imaging may be appropriate.

For more information, see the Abdominal Aortic Aneurysm ([https://www.radiologyinfo.org/en/info/abdoaneurysm](https://www.radiologyinfo.org/en/info/abdoaneurysm)) page.

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