About Weill Cornell Medicine Cardiothoracic Surgery

One of the largest aortic surgery centers in the region and country—Most hospitals perform about 20 per year, NYP | WCM performs close to 300 aneurysm procedures per year

Among the Top Heart Surgeons in The Nation

Excellent Outcomes in Our Patients

Low Rate of Complications

Leaders in Research & Clinical Trials

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About Aneurysms

An aortic aneurysm is an enlargement or dilatation of the aorta, which is the major blood vessel responsible for carrying blood to the entire body. Aortic aneurysms tend to slowly grow over time. If the aneurysm becomes too large, it may be at higher risk for rupturing (bursting) or tearing (aortic dissection), requiring emergency surgery to repair it. We aim to discover and repair these aneurysms before emergencies occur in order to minimize the risk to our patients and provide optimal outcomes.

Aneurysms of the aorta can occur in several different areas. The aorta begins at the heart, supplying blood to the heart itself through the coronary arteries. It then rises in the front of the chest as the "ascending aorta." This is a common area for aneurysms to occur. The aorta then curves around from the front of the chest to the back as the "aortic arch," which supplies blood to the head and the arms. The aorta descends down the back as the "descending thoracic aorta." It enters the abdomen, where it supplies blood to the liver, kidneys, and other vital organs. Finally, the aorta splits in the pelvis into two branches that supply blood to the legs.

For more information regarding Aortic Aneurysm, please visit our website https://ctsurgery.weillcornell.org/cardiac-surgery
Surgery is Required

There are two surgical techniques used to treat a large aneurysm:

1. Open Aneurysm Surgery
2. Endovascular Aneurysm Repair Stents

Participate with our Aortic Aneurysm Monitoring Program

Early identification of an aneurysm is critical and can be accomplished through non-invasive screening techniques such as echocardiography, CT scanning, or MRI.

Once an aneurysm has been identified, our aortic surgeons will meet with you to discuss how to proceed next.

If surgery is not yet necessary, we will continue to monitor the aneurysm with you and send reminders to you for follow-up imaging:

- From the comfort and privacy of your home, office or wherever you are, a video visit appointment with our Aortic Team Nurse Practitioner will be scheduled.
- You can fax your results to us, upload Images from a CD using Ambra (see How to Transfer Medical Images to Your WCM Physician) or Send the CD via regular mail.

If you need to have the aneurysm repaired, you may be a candidate for elective surgery with either a traditional or minimally invasive approach.

Minimally Invasive Endovascular Aneurysm Repair

For patients with aneurysms with appropriate anatomy and those who may be too ill to have conventional open surgery, we offer minimally invasive, endovascular stent grafting (TEVAR) for aneurysm repair. Our surgeons thread a catheter into the aorta through an artery in the groin. A stent is guided through the catheter and placed at the site of the aneurysm, where it is opened and excludes the aneurysm from the rest of the aorta. This is an excellent minimally invasive option for many aneurysms of the thoracic aorta. Stent grafts are especially useful for abdominal aortic aneurysms (AAA), where we can often offer a totally percutaneous endovascular aneurysm repair (EVAR) that doesn’t require any incisions.

Surgical Repair

At Weill Cornell Medicine, about 300 thoracic aortic aneurysms are repaired per year—the national average is 20. In an elective setting, our surgeons have maintained a mortality rate of less than 1% for over 15 years. A number of patients with ascending aortic aneurysms may need the aortic root, which is the base of the aorta near the heart, repaired as well. Often this requires replacing the aortic valve. However, our surgeons have extensive experience in valve-sparing aortic root repairs that allow patients to keep their own valves. Surgical repair of aneurysms of the descending thoracic aorta and thoracoabdominal aorta requires exceptional skill to minimize the risk of complications. Our center is one of a few centers throughout the country that successfully performs this type of surgery on a routine basis with some of the lowest complication rates in the world.

How To Transfer Medical Images To Your WCM Physician

Step 1
We use Ambra Health to transfer medical images. Preferred Browsers:

- Chrome
- Firefox

Step 2
Navigate to https://ctsurgery.weillcornell.org
Patients and Visitors, then to Upload Images page.

Step 3
Make sure you are on the correct page.

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