Tools, Education & Resources for a Healthier You!

VASCULAR VITALITY

Cooper University Health Care

A publication of Cooper University Health Care
Division of Vascular and Endovascular Surgery

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Winter/Spring 2021

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IN THIS ISSUE

Dear Readers,

We believe that education is the key to better health, not only in treatment but in prevention and awareness. We have developed this publication as a tool for education with articles devoted to you vascular health, information about diseases that affect the vascular system, and the latest in treatments.

It is our hope that you will read this publication, save it for future reference, and share it with family and friends.

Communication with your primary care provider is vital to maintaining the health of your vascular system. Risk factors such as tobacco use, high blood pressure, diabetes, high cholesterol, and a family history of vascular disease can significantly increase your risk. Talk to your doctor about screenings for abdominal aortic aneurysm, carotid artery disease, and peripheral vascular disease — these simple, non-invasive screenings can be lifesaving.

In good health,

Joseph V. Lombardi, MD, FACS
Professor & Head, Division of Vascular and Endovascular Surgery
Director, Acute Aortic Treatment Center
Director, Vascular Surgery Integrated Residency

Aortic Aneurysms

An aneurysm is a weakened area of a blood vessel that expands or bulges. Many aneurysms occur in the aorta, the main artery that moves blood from the heart to the rest of the body.

Most aneurysms are caused by arteriosclerosis, or "hardening of the arteries", which weakens the aortic wall, while others can be the result of genetics or trauma. When an aneurysm expands to the point of rupture, severe internal bleeding can occur. If a ruptured aneurysm is not discovered and treated quickly, the patient may not survive.

Most aortic aneurysms occur in men older than 60. However, women who have certain risk factors also have an elevated chance of developing aneurysms. Cigarette smoking, diabetes, high blood pressure, and high cholesterol all contribute to the chances of developing a life-threatening aneurysm.

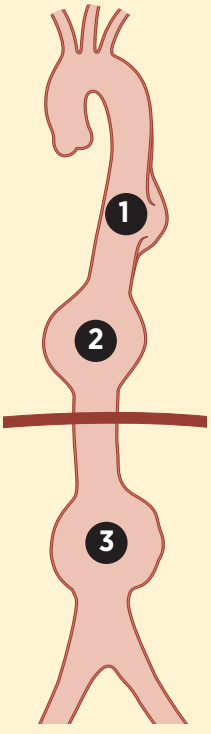
Every second counts when it comes to aneurysm ruptures. Most aneurysms are found accidentally or during a physical examination by a primary care physician. If diagnosed early enough, aneurysms can be repaired.

Cooper's Aortic Center has a team of four vascular, endovascular, and cardiothoracic surgeons who specialize in the care and treatment of aortic disease—the only team of its kind in South Jersey. Each year they perform more than 300 minimally invasive and open procedures in a specially designed hybrid operating room that integrates sophisticated imaging and anesthesia with cutting-edge surgical technology.

Cooper vascular and cardiothoracic surgeons are leaders in the endovascular repair of aortic disease and are renowned for their ability to perform complex open surgical procedures. They work closely with each patient to identify the most appropriate treatment options.

Types of aortic aneurysms:

1. **Thoracic aortic dissection** is a tear that causes blistering of the aortic wall, which can rupture. An aortic dissection can be life-threatening. Symptoms of an acute aortic dissection include constant chest and/or upper back pain, described as "tearing." The pain may move from one place to another.
2. **Thoracic aortic aneurysms** appear as bulging, weakened areas in the wall of the aorta. They can rupture or dissect, potentially causing life-threatening bleeding. Many people with thoracic aortic aneurysms do not notice symptoms until a rupture occurs and causes chest or back pain.
3. **Abdominal aortic aneurysms** are located in the abdomen. The abdominal aorta supplies blood to the lower part of the body, and a ruptured aneurysm in this location can cause life-threatening bleeding. An abdominal aortic aneurysm may not produce symptoms and can be discovered accidentally through ultrasound or CT scans when looking for other conditions. Sometimes they are detected when a physical examination shows an abnormal prominent pulse in the abdomen. When symptoms occur, they include abdominal and back pain.



Cooper Aortic Center

Among First in Nation to Offer New Endovascular Treatment of Type B Dissections

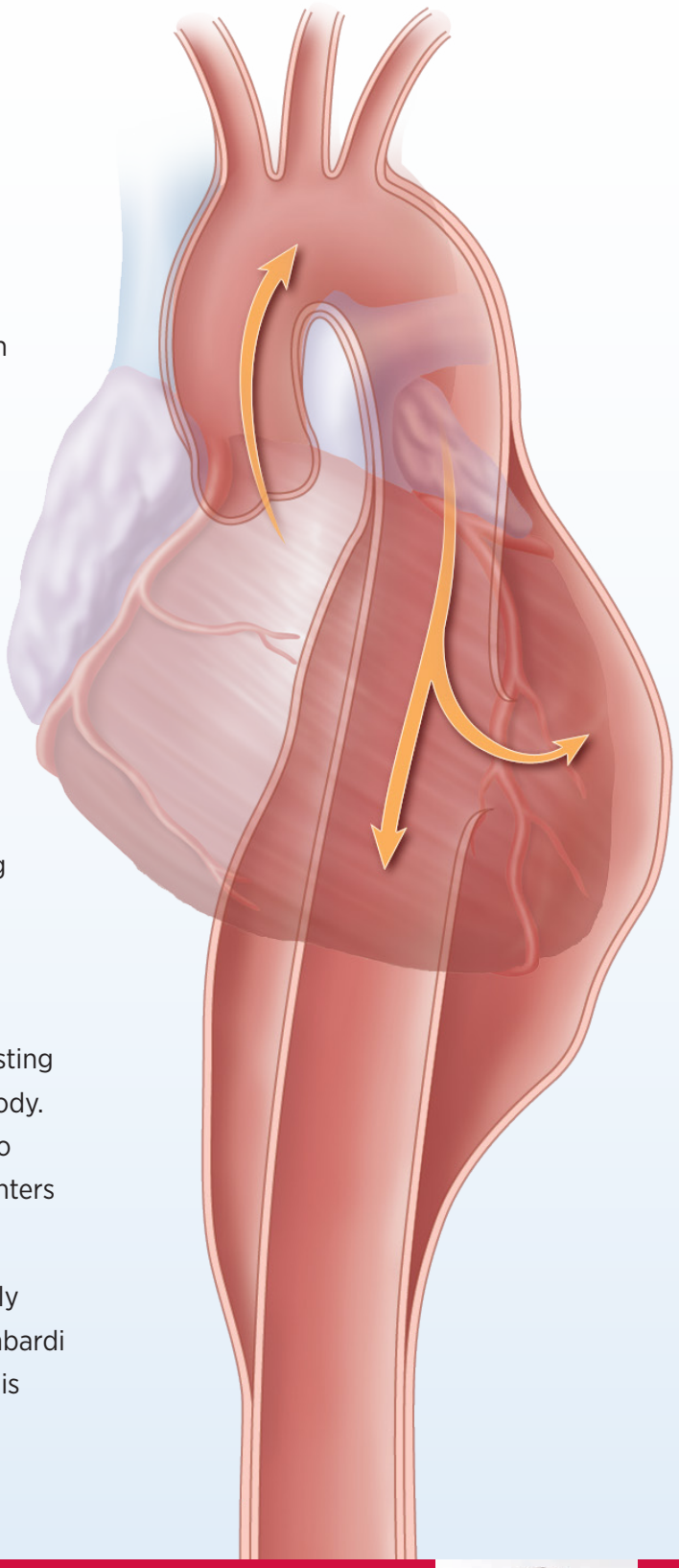
When Cook Medical recently received FDA approval for its Zenith® Dissection Endovascular System, it was a major milestone for Cooper—which served as the flagship institution for the clinical trial that led to the device's clearance.

"This is the first and only "disease-specific" system of its kind that provides a less invasive alternative to open surgery for repair of complicated type B dissections of the descending thoracic aorta," says Joseph V. Lombardi, MD, FACS, Head, Division of Vascular and Endovascular Surgery and Director of the Cooper Aortic Center, who served as the study's global principal investigator.

The Zenith system consists of a proximal stent-graft component and a distal bare stent component, which are delivered to the dissection site via catheter. Instead of making a large incision in the chest, the physician enters the femoral artery near each hip to insert the device, and then guides the device into place in the aorta.

Once in place, the device helps to prevent the aorta from bursting and can reestablish vital blood supply to other areas of the body. Before it was approved by the FDA, the device underwent two multi-year clinical trials with more than 160 patients in ten centers nationwide between December 2007 and August 2014.

"Advances like this give the medical community, and ultimately our patients, more options for a successful outcome." Dr. Lombardi and a team performed the first commercial procedure with this device in the United States in March 2019.



"Advances like this give the medical community, and ultimately our patients, more options for a successful outcome."

Joseph V. Lombardi, MD, FACS
Professor & Head, Division of Vascular and Endovascular Surgery

Carotid Artery Disease
and the Risk of Stroke

Carotid artery disease is a serious condition that occurs when the blood vessels in the neck that carry oxygen-rich blood to the brain (carotid arteries) become narrowed by accumulation of a fatty, waxy substance called plaque.

Carotid artery disease is one of the primary causes of stroke. Blockages caused by carotid artery disease can restrict blood flow to brain tissue or promote a blood clot that cuts off blood flow entirely.

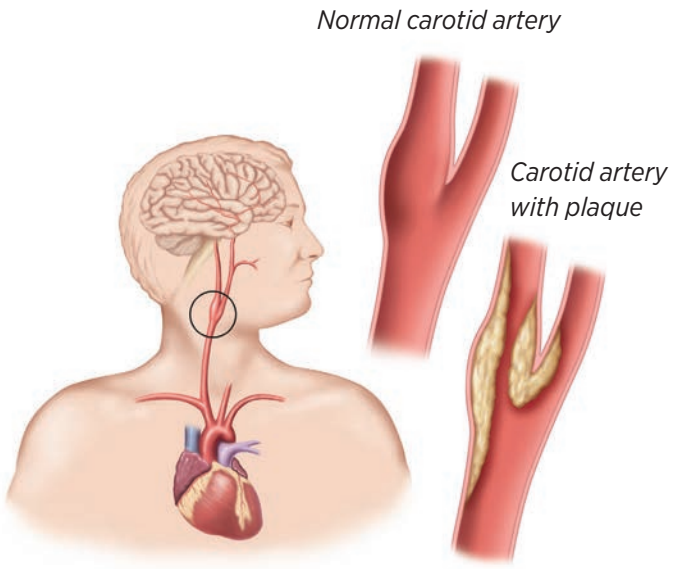
Identifying and treating carotid artery disease is critical in reducing the risk of a first or recurrent stroke. Learning more about carotid artery disease is an early step in working to protect brain health. The most common type of stroke is ischemic stroke which can result from blockages caused by carotid artery disease. Less commonly, a blood vessel in the brain can rupture, causing a hemorrhagic stroke. When the flow of blood to brain tissue is cut off, that tissue begins to die, resulting in disability or even death.

Stroke is a leading cause of death and long-term disability in the United States. According to the American Heart Association, each year, nearly 800,000 people in the United States experience a stroke.

Identifying and treating carotid artery disease is critical in reducing the risk of a first or recurrent stroke. Learning more about carotid artery disease is an early step in working to protect the brain's health. •

Risk factors for carotid artery disease:

- Family history of carotid artery disease or atherosclerosis
- Age: Before age 75, men have the greatest risk; after age 75 women have the greatest risk
- Smoking
- High blood pressure
- High cholesterol
- Diabetes
- Obesity
- Inactivity



"Our vascular surgeons at Cooper treat all aspects of vascular disease and perform the most stroke prevention procedures in the region, including the most complicated and high-risk patients."

ABOUT OUR

Vascular and Endovascular Program

Our doctors, who are all fellowship-trained, are among the best vascular and endovascular surgeons in the country.

U.S. News & World Report, Best Doctors in America, Castle Connelly Top Doctors, Philadelphia Magazine Top Doctors, South Jersey Magazine Top Physicians have all honored our surgeons for their excellence.

The strengths of our division include:

- **High volumes of procedures:** We are a high-volume center for carotid artery surgeries, aortic aneurysm repairs, and lower extremity limb salvage procedures. Performing a high number of procedures contributes to the depth of our surgeons' experience and helps to ensure excellent outcomes for our patients.

- **Devoted surgical team:** Our surgeons carefully follow strict quality protocols, which improve our patients' safety during procedures. Our advanced practice nurses and operating room technicians are completely dedicated to the care of patients with vascular diseases.

- **The latest technologies:** We have extensive experience with traditional open surgery and endovascular surgery. Our Hybrid OR Suite allows our surgeons to use both approaches as part of your treatment to ensure you receive the best care possible. Endovascular techniques are minimally invasive, resulting in less pain after surgery and shorter recovery times.

- **Surgical training programs:** The hallmark of any quality vascular department is a thriving education program. Our doctors, who are highly knowledgeable in the latest standards of care, train future generations of vascular and endovascular surgeons through surgical residency and fellowship programs. Our skilled residents and fellows provide evaluations and assist with surgical procedures. Having several doctors overseeing your treatment plan helps to ensure excellent care.

- **Access to clinical trials:** Our patients have access to the latest clinical trials, many of which use new technologies for treating more complex vascular disease. We are participating in more than 10 global clinical trials, leading the advancement of new methods for minimally invasive vascular surgery. We participated in the trials for several new FDA-approved devices for treating aneurysm and peripheral vascular disease (PVD).

Our Vascular Providers

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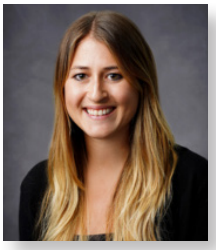

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Cooper Vascular Surgery

Cooperhealth.org

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LOCATIONS

- Camden
- Egg Harbor Township
- Moorestown
- Sicklerville
- Voorhees
- Washington Township
- Willingboro
- Woodstown

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