

# Keeping you in circulation

Screenings and prevention are keys in the fight against a silent foe — aortic aneurysm

► **The specialist: Dr. Michael L. Marin on aortic aneurysm awareness**

Surgeon-in-chief of The Mount Sinai Hospital and chairman of the department of surgery, Dr. Michael Marin oversees more than 250 aortic aneurysm repairs a year.

► **The big story**

The aorta is the body's largest artery, running from the heart down the back of the spine to the pelvis, where it branches. Doctors use the term aneurysm to describe what happens when the walls of an artery stretch out beyond their normal size. "Aortic aneurysm is the term we use to describe the enlargement of the aortic artery to more than two times its normal size," explains Marin.

► **Who's at risk**

An aortic aneurysm is an extremely common problem that affects 5%-7% of Americans over the age of 60. At least 200,000 new cases are diagnosed every year, and at least 15,000 Americans die from it. Doctors suspect the true number may be two or three times higher, because aortic aneurysms so often go undiagnosed. "It is a silent problem," explains Marin. "Many patients go undiagnosed, and when they die we think they've died in their sleep or assume it was a heart attack." Albert Einstein and Lucille Ball both died of aortic aneurysms, Marin notes.

The health problem is associated with aging. "It's predominantly found in the sixth, seventh and eighth decade," says Marin. "At the present time, men over the age of 65 who have ever smoked represent the highest risk group."

There's a genetic component, and having a parent or sibling who has had an aortic aneurysm may increase your risk by as much as 20%. Smokers also have a much higher risk, though doctors haven't pinpointed why. Uncontrolled high blood pressure also may be a factor, perhaps due to the extra pressure and force it puts on the artery.

► **Signs and symptoms:**

Because it doesn't usually present any symptoms, aortic aneurysms are usually caught during a routine screening (generally done on people over age 65) or diagnosed incidentally; they're noticed when someone is being checked for something else. "For instance, you have back pain, or a kidney stone, or gall bladder disease, and get X-rays or an imaging study — and the aortic aneurysm is seen," says Marin.

Aortic aneurysms can also be diagnosed through a simple

► **What you can do:**

■ **Get informed.**

The Society for Vascular Surgery runs a great Web site ([www.vascularweb.org](http://www.vascularweb.org)) that includes helpful information on specialists, screening and clinical trials.

■ **Get screened.**

Hundreds of thousands of Americans don't know they have aortic aneurysms, even though an abdominal ultrasound can diagnose it with almost 100% accuracy. "Frankly, anybody over 65 who hasn't been screened should be," says Marin. Medicare will cover screening costs for men 65 and over if they've smoked.

■ **Keep your blood vessels healthy.**

Marin offers a short list of vital tips for general vascular health: Eat a healthy diet, get exercise, don't smoke, and get your cholesterol checked.



**Vascular surgeon Dr. Michael L. Marin says simple physical exams may help spot aneurysms.**

SUSAN WATTS/DAILY NEWS

physical examination. "You can actually feel the aortic pulse through the belly button," explains Marin. "If you have an aortic aneurysm, you feel the pulse much stronger. Instead of being a narrow tube about the width of a garden hose, you might be able to feel what feels like a pulsating light bulb."

► **Traditional treatment:**

Being diagnosed is a serious matter, but the good news is that it is a problem that grows slowly. Marin warns patients to "avoid fear and panic," pointing out that "it takes years — probably between 5 and 10 years — for an aortic aneurysm to develop and grow to a size where it needs treatment." On average, aortic aneurysms grow only one-third of a centimeter per year, and doctors wait until the aortic aneurysm is somewhere between 5 and 7 centimeters before recommending treatment. Aneurysms smaller than 5 centimeters are monitored by ultrasound and CAT scan.

For the past 50 years, the standard of care was a treatment called open repair of aortic aneurysm. In this procedure, the surgeon makes a 12-inch incision from the

**BY THE NUMBERS:**

- 200,000 Americans are diagnosed with aortic aneurysm every year; 50,000 of them undergo surgery as a result
- aortic aneurysms affect 5%-7% of Americans over the age of 60
- at least 15,000 Americans die each year from ruptured aortic aneurysms
- 80%-90% of people who have a ruptured aortic aneurysm will die

bottom of the breast bone down to the pubic bone, and replaces the damaged artery with a tube-like graft made out of a strong synthetic material.

In 1990, Argentine surgeon Juan Parodi developed a way to fix the artery by inserting a new lining on the inside of the artery. This procedure is called endovascular, or stent-graft, repair. When Parodi came to New York in 1992, Marin joined him in performing this procedure for the first time in the States. "We put a new tube inside your artery tube," Marin says. "Now the blood goes inside the new tube, and doesn't touch the old aneurysm, protecting you from the threat of rupture." Instead of cutting the patient open, the surgeon makes only a small incision in the groin area, and pushes the graft through a catheter up to the aorta, using X-rays to guide the movement.

► **Research breakthroughs:**

Parodi's endovascular repair procedure is the major breakthrough of the generation, and much of the current research focuses on improving it.

"A lot of what we're working on now is making those devices stronger, more durable, and capable of supporting more complicated aneurysms," says Marin.

Doctors are simultaneously working on ways to fight aortic aneurysms by improving screening and prevention. Mount Sinai is conducting a major survey of hundreds of families where three or more family members have aortic aneurysms. "If we could find the genes that lead to the development of aneurysm, we could screen people that way," says Marin. For now, doctors don't know many ways to prevent aortic aneurysms from developing in the first place. "We consider that the future of research," says Marin.

► **Questions for your doctor:**

Physical examination is a cheap and effective way of screening for aortic aneurysm, and your doctor could do one during a routine checkup. Marin advises patients to be as blunt as asking, "Can you feel my belly for an aortic aneurysm?"

If you are diagnosed, ask your doctor, "Can you refer me to a vascular surgeon?" Marin says. "The designation to look for is a vascular surgeon who specializes in aortic aneurysm repair. There's no need to fear that you have a time bomb ticking inside you," says Marin. "Finding the aortic aneurysm and treating it before it ruptures is the most important thing." ♦