

Patient Information on Aortic Aneurysm



A ruptured **aortic aneurysm** usually comes as a complete surprise. It is called a silent killer because there may be no symptoms before it suddenly ruptures. And when it does rupture, it is a true medical emergency, killing about 15,000 Americans each year.

But it is easy to avoid this potential health crisis. Simple tests can show if you have an aortic aneurysm, and expert treatment can repair it before it ruptures. That's why it's so important to be aware of your risk factors so you can be screened for this condition.

What you need to know about Aortic Aneurysms

An aortic aneurysm is a bulge in your aorta, your largest blood vessel. The aorta carries fresh oxygen and nutrients from your heart to your major organs and to smaller blood vessels, which distribute blood throughout your body.

This bulge is caused by a weakening in your aorta wall. It occurs most often in the abdominal area, so it is usually called an abdominal aortic aneurysm, or AAA. When it occurs in the upper part of your aorta, it is called a thoracic aortic aneurysm, but this is much less common.

As the bulge grows, the aorta wall becomes thinner. This makes it more likely that your aorta could leak or rupture, spilling blood into your body. Because the aorta supplies so much blood, a rupture can be deadly.

What are the symptoms?

When aortic aneurysms are small, there usually are no symptoms. But as it expands, it may cause a pulsating sensation near your navel; you may notice that a book resting on your abdomen moves up and down. When an AAA ruptures, symptoms are sudden and severe, with crushing abdominal or back pain. The symptoms are:

- > Pulsating in your abdomen
- > Tenderness or pain in your abdomen or chest
- > Feeling of fullness after eating a small amount
- > Frequent nausea or vomiting
- > Sudden onset of crushing abdominal or back pain

If you experience any of these symptoms, you should call your doctor. Prompt action may prevent a life-threatening situation.

Who may be at risk?

Age, family history and smoking are the three most common risk factors for aortic aneurysms. Your risk increases steadily as you grow older. If you have one or more family members who have had this condition, you have a greater chance of developing an AAA at a younger age. Men are about four times more likely than women to develop an AAA, but women have a greater tendency to have an AAA that ruptures.

- > Age over 60 years
- > A family history of AAA
- > Smoking
- > High blood pressure
- > Atherosclerosis
- > Previous chest injury
- > Marfan Syndrome

How to find out if you have AAA – Testing

If you are at risk for AAA, you should discuss it with your doctor. Simple screening tests determine if you have an aortic aneurysm and assess your risk of rupture.

- > **Physical exam:** Your doctor may be able to detect an aortic aneurysm by pressing on your abdominal wall or listening through a stethoscope.
- > **Ultrasound:** For this safe, simple and painless test, an ultrasound technician passes a wand over your abdomen, using sound waves to create a computer picture of your aorta.
- > **CT scan:** A CT scan of your abdomen uses multiple X-rays to create a very clear picture of your aorta. Many AAAs are discovered when you have a CT scan for another reason.

Monitoring

Using an ultrasound or CT scan, your doctor measures the size of the bulge to determine if treatment is needed. Generally speaking, if the AAA is 4.5 cm or less (about two inches), your doctor will recommend periodic retesting to determine if it is growing. If the AAA is fast growing and gets larger than 4.5 cm, that means your aorta wall is in danger of rupture, so treatment is recommended.

How AAA is treated

There are two methods for treating AAAs—surgical procedure and endovascular procedure. Both treatments work very well and have long-lasting results. The type of treatment you get depends on your overall health and other factors. Most procedures require no more than an overnight hospital stay, and patients enjoy an early return to most normal activities.

- > **Surgery:** Vascular surgeons make an incision in your abdomen where the aneurysm is located. Then they replace the damaged portion of the aorta with a synthetic tube that is sewn into place.
- > **Endovascular procedure:** Vascular surgeons make an incision in your groin and thread a collapsed synthetic tube through your vein and into your aorta to the site where the aneurysm is located. Then they inflate the tube inside the aorta, strengthening the wall and sealing off the aneurysm.