

# Aneurysm

## What is an aneurysm?

An aneurysm is a bulge or ballooning of the weakened wall of a blood vessel or of the heart. If the bulge stretches too far, it may leak or tear (rupture).

Aneurysms are most common in the aorta, the main blood vessel that carries blood from the heart to the rest of the body. When a rupture occurs in the aorta, it causes heavy bleeding. The sudden heavy bleeding causes shock and often rapid death.

When an aneurysm in an artery of the brain ruptures, it causes a stroke.

## How does it occur?

It is not known for sure why aneurysms occur in some people and not others. People with the greatest risk are men over age 55. Aneurysms are among the top 10 causes of death in this group. Men are 5 times more likely to have abdominal aortic aneurysms than women. Brain artery aneurysms affect both men and women of all ages. Aneurysms may be caused or worsened by:

- arteriosclerosis (hardening of the arteries)
- birth defects that affect the structure of the aortic wall
- high blood pressure
- infection
- injuries
- smoking.

Diseases such as infective endocarditis, Kawasaki's disease, Marfan syndrome, rheumatoid arthritis, Reiter's syndrome, ankylosing spondylitis, and others, may cause aneurysms in many parts of the body. Some types of aneurysms may run in families.

## What are the symptoms?

Aneurysms do not always cause symptoms. They are often noticed during routine medical exams. Many are found during diagnostic procedures for other problems.

Symptoms depend on where the bulge is. A pulsating sensation may be felt. Pain is caused from the pressure on surrounding organs. Aneurysms in the brain may cause vision problems or headaches. An aneurysm in the chest may affect swallowing or might cause chest pain if it presses on the lungs. An abdominal aortic aneurysm might cause pain in the back or the groin. Most people are unaware of an aneurysm until it begins to leak or rupture, and then they describe the pain as severe or tearing.

## How is it diagnosed?

Several kinds of tests may be used:

- angiogram (X-rays of the inside of blood vessels)
- CT scan

- MRI scan
- spinal tap (to check for blood in the cerebrospinal fluid, which can be caused by a ruptured aneurysm in the brain)
- ultrasound scan
- X-rays.

### **How is it treated?**

A small aneurysm may be monitored over time to see if it gets bigger. Your healthcare provider may prescribe high blood pressure medicine to reduce the pressure of blood against the arterial walls. If the aneurysm continues to grow, or begins to cause symptoms, your healthcare provider may want you to have surgery.

The risk of rupture increases with the size of the aneurysm. An aneurysm in the aorta can grow to the size of an orange before it ruptures. One-third of aortic aneurysms that are larger than 2 inches wide will rupture within 5 years. The risk of dying from an aortic aneurysm after it ruptures is about 90%. Rupture of an aneurysm is a medical emergency.

Larger aneurysms are usually treated with surgery. Discuss the advantages and disadvantages of surgery with your healthcare provider.

### **How long will the effects last?**

Most aortic aneurysms grow slowly. Over many years, the walls slowly stretch and enlarge like a balloon. A normal aorta is about as wide and as tough as a garden hose. If the aneurysm does not grow much, you may live with a small aneurysm for years.

Successful surgery usually results in full recovery. Any new symptoms should be quickly reported to your healthcare provider. Aneurysms generally do not come back after surgery, unless you have one of the unusual diseases that cause aneurysms in many parts of the body.

### **What can help prevent an aneurysm?**

- Have your blood pressure and blood cholesterol checked regularly.
- If you smoke, quit. Tell your healthcare provider if you need help quitting.
- If you are overweight, talk to your provider about losing weight.
- Exercise regularly according to the recommendations of your provider.
- Switch to a low-fat, low-cholesterol, high-fiber diet. Your provider or a dietician can tell you which foods to avoid.
- Find ways to reduce stress.
- If your provider approves, take an aspirin a day. However, check with your provider first. There may be reasons why you should not take aspirin. Your provider may prescribe other medicines that can slow the progress of artery disease.

Developed by RelayHealth

Published by RelayHealth.

© 2008 RelayHealth and/or one of its affiliates. All Rights Reserved.

This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.