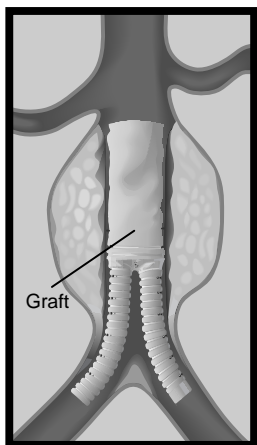




There are two methods to repair AAA:

- **Open Surgical Repair.** The traditional treatment for AAA is a surgical procedure. An incision is made in the abdomen and the surgeon opens the aneurysm and sews in place a vascular graft — a tube made of cloth that lines the weakened area of the aorta, blocking the supply of blood to the aneurysm.
- **Endovascular Repair.** In this minimally invasive technique, a catheter, or small tube, is inserted into the blood vessels through a small incision in the groin. Under X-ray guidance, a vascular graft is delivered through the catheter and placed inside the aneurysm.

The final decision to repair an aneurysm and the method of repair will depend on a number of factors, including the nature of the aneurysm and the patient's overall health.



This brochure was created by the Society of Interventional Radiology (SIR) to answer frequently asked questions about abdominal aortic aneurysm (AAA), a weak area in the main blood vessel that carries blood from the heart. It contains general information about AAA, including who is at risk, how the condition is diagnosed, and the treatment options available.

For more information on interventional radiology, contact the Society of Interventional Radiology at 1-800-488-7284 or visit www.sirweb.org

INTERVENTIONAL RADIOLOGY

Abdominal Aortic Aneurysm (AAA)

SOCIETY OF INTERVENTIONAL RADIOLOGY

Enhanced care through advanced technology™

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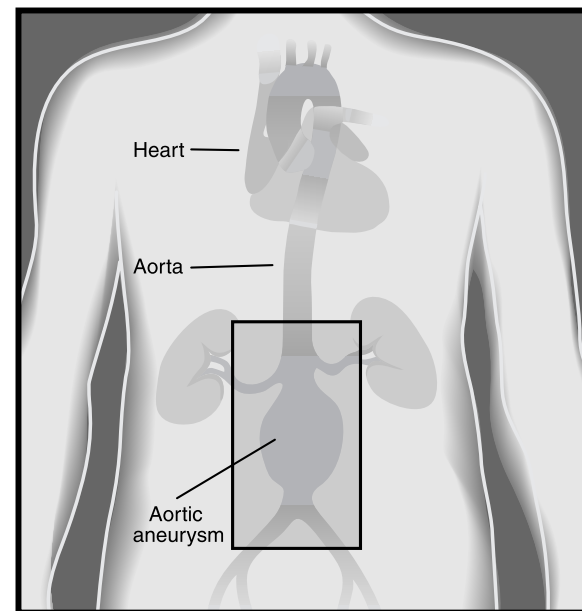
Questions and Answers about Abdominal Aortic Aneurysm

Q. What is AAA?

A. An aortic aneurysm is a weak area in the main blood vessel that carries blood from the heart to the rest of the body. As blood flows through the aorta, the weak area bulges like a balloon and can burst if the balloon gets too big.

The most common site for an aortic aneurysm to occur is below the area where the aorta divides to supply blood to the kidneys and above where it divides to supply blood to the pelvis and legs. An aneurysm in this location is called an abdominal aortic aneurysm (AAA).

A small aneurysm may require no treatment other than checking the aneurysm regularly to be certain it does not grow. If an aneurysm reaches a certain size, however, treatment is often necessary.



Q. How common is AAA?

A. Abdominal aortic aneurysm occurs in five to seven percent of people over the age of 60 in the United States. Approximately one in every 250 people over the age of 50 will die of a ruptured AAA. The condition is the 17th leading cause of death in the U.S., accounting for approximately 15,000 deaths each year.

Q. Who is at risk?

A. AAA occurs most often in people over the age of 60, and males are four times more likely to have the condition than females. Smoking also is a significant risk factor for AAA, and people who have a family history of AAA or other aneurysm also are at higher risk. Atherosclerosis (sometimes called “hardening of the arteries”), a history of heart disease, or high blood pressure may also put you at higher risk. If you are in a risk category for AAA, you should discuss with your physician whether you should be tested for the condition.

Q. What are the symptoms of AAA?

A. AAA is sometimes called a “silent killer” because, in most cases of ruptured aneurysm, there are no warning symptoms. When symptoms are present, the most common ones are:

- intense abdominal pain, which can be constant or may come and go
- pain in the lower back that may radiate to the buttocks, groin or legs
- the feeling of a “heart beat” or pulse in the abdomen



- fatigue
- the aneurysm can sometimes be felt as a soft mass in the abdomen

If an aneurysm expands rapidly, tears open or bursts, or if blood leaks along the wall of the blood vessel (i.e. aortic dissection) severe symptoms may develop suddenly. A ruptured aneurysm is life-threatening and requires immediate emergency care. These symptoms may include:

- severe pain that begins suddenly
- paleness
- rapid pulse
- dry mouth/skin and excessive thirst
- anxiety
- nausea and vomiting
- lightheadedness or fainting
- excessive sweating or clammy skin
- shock

If you experience these symptoms, seek immediate emergency care.

Q. How do I know if I have an AAA?

A. If you are in a high risk category for AAA, you should discuss with your doctor whether you should be tested for the condition.

A careful physical examination can detect many, but not all, abdominal aortic aneurysms. By placing a stethoscope on the abdomen, your doctor may hear the sounds of abnormal blood flow through a weakened area of the aorta. The physician also may be able to feel an aneurysm by pressing gently on the abdomen. Physical examination is most likely to detect aneurysms that are large, and is more reliable in detecting AAA in people who are thin.

If your physician suspects that you have an AAA, or are at high risk for one, there are a number of imaging exams that can be used to

“see” the aorta and confirm whether an aneurysm is present.

- **Ultrasound.** The most common test to screen for AAA is ultrasound, a safe, painless procedure in which a transducer — a device about the size and shape of a computer mouse — is passed over the abdomen. The transducer detects sound waves that are used to create computerized pictures of the aorta. Ultrasound can diagnose small aneurysms which often cannot be detected during physical exam.
- **Computed tomography (CT).** A type of computerized X-ray in which a special dye (called a contrast agent) may be injected to highlight the blood vessels.
- **Magnetic resonance (MR) imaging.** In an MR image, computerized pictures of the blood vessels are created without X-rays, using radio waves and magnetic energy.
- **Arteriography.** An arteriogram (also called an angiogram) is a series of X-rays in which a contrast dye is injected to show the flow of blood through the blood vessels.

Q. How is AAA treated?

A. If an aneurysm is small, it may require no treatment other than “watchful waiting.” The aneurysm should be monitored by a vascular specialist who will order periodic ultrasound exams or other tests to determine if the aneurysm is growing. Many aneurysms remain small and pose no significant risk. If an aneurysm reaches a certain size or grows at a rapid rate, repair may be necessary to prevent rupture. A normal aorta is approximately 2.3 centimeters (1 inch) in diameter in men and 1.9 centimeters (3/4 inch) in women. In general, an aneurysm that grows in size to 5 centimeters (approximately 2 inches) will require repair.