

## Abdominal Aortic Aneurysm

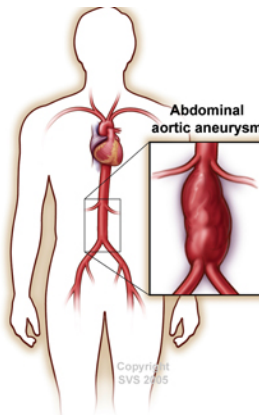
by Joseph L. Mills, Sr., MD

*Professor of Surgery*

*Chief of Vascular and Endovascular Surgery*

*University of Arizona*

Are you aware of what Lucille Ball, Conway Twitty, George C. Scott, and Albert Einstein all had in common? Of course they were famous individuals whose names are still widely recognized throughout the world. They all died of the same disease. No, they didn't die of a heart attack or cancer; they all died of a ruptured aortic aneurysm. Many people know little or nothing about abdominal aortic aneurysms (AAA).



The aorta is the largest blood vessel in the body; it is the major vessel into which the heart pumps blood. It curves backward behind the heart to lie against the spine, travels downward through the chest and abdomen, giving off branches to all the major organs on the way, until it branches just below the level of the navel to give off the major arteries to the legs. The portion of the aorta in the abdomen, up against the spine, is prone in some individuals, to weaken, enlarge, and form an aneurysm. As an aneurysm enlarges, it is prone to burst. Since aneurysms lie in the very back of your abdomen, they are hidden from the patient and their doctor and are not usually detected on a routine physical.

This is not a rare disease. It is estimated that 200,000 individuals in the United States have an AAA, many of whom are totally unaware of it. Who is at risk for this problem? At greatest risk are men more than 60 years of age with a history of smoking. Women may also develop aneurysms, especially those from families with a history of this disease. As a large population of baby boomers reach retirement age, this disease is likely to become even more common.

It has been further estimated that 15,000 people per year die of a ruptured AAAs. Once rupture occurs, the chance of survival is less than 25 percent. Fortunately, the condition is easy to detect with a simple non-invasive test: an abdominal ultrasound. The test is safe, accurate, and does not involve the use of needles, dye or radiation. Men more than 60 years of age with a history of smoking, heart disease or other risk factors for vascular disease such as high blood pressure; and woman more than 60 years of age with a

history of AAA or sudden unexplained death in their family, should undergo an abdominal ultrasound to check for an aneurysm.

If an aneurysm is detected, patients should request referral to a specialist, a vascular surgeon. Vascular surgeons are experts in the management of aortic aneurysms. Small AAAs can be followed safely with ultrasound or CAT scans to be sure they aren't growing. Once aneurysms reach 5-5.5 cm in diameter, about the size of a small to medium-sized orange, they should generally be repaired. Fortunately, many such aneurysms can be repaired with minimally invasive surgery, either with no incisions at all, or small incisions in one or both groins. Some complex AAA's require open abdominal surgery for repair.

Vascular surgeons are experts in both techniques, and both approaches have excellent results. The keys are early detection of AAA, close follow-up of individuals with small aneurysms, and careful selection of repair technique once the aneurysm reaches a critical size.

If you are found to have an aneurysm, request referral to a Board-certified vascular surgeon in your region. He or she can provide more information about the condition; arrange careful follow-up for smaller aneurysms; and perform repair to prevent rupture when indicated. People who smoke need to quit. Tobacco smoking causes cancer, lung disease, heart disease and is associated with an increased risk of both developing an AAA and of having it rupture once it develops. People cannot change their age or their genes, but they can stop smoking.

**To learn more about your vascular health and find a vascular surgeon visit [VascularWeb.org](http://VascularWeb.org).**