

Aortic Aneurysms

The Basics

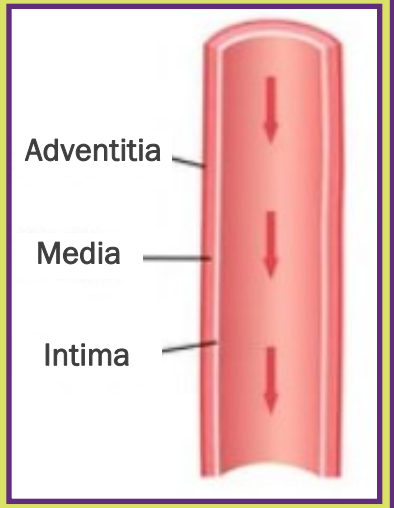
The **aorta** is the main and largest blood vessel in the body that takes blood from your heart and takes it to every part of the body, including the heart itself, the brain, arms, legs and organs. An aneurysm is a blood vessel that is bigger than it should be. It can appear as a bulge that occurs when the wall of the aorta becomes weakened or damaged.

Aneurysms can develop anywhere along the aorta. The pressure of the blood flowing through the aneurysm creates a **bulge at the weak spot**, which causes it to “**balloon**” or expand in size. The bulge usually starts small. The aneurysm may grow over time as the pressure continues.

Aneurysms are often found during image done to evaluate other problems (**incidentally**) . They commonly cause **no pain** or **discomfort** and can enlarge for prolonged periods of time without being found. The wall of the blood vessel can split or “**tear**” (**dissection**) or even “**burst**” (**rupture**). This can cause life-threatening internal bleeding or other serious complications.

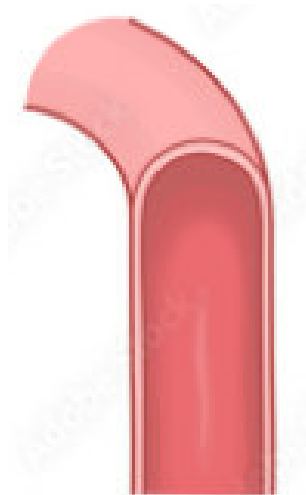
Aortic Wall

An Aneurysms involves all three layers of the blood vessel wall



There are **two kinds** of aneurysms:

- ▶ **Fusiform** - Balloons out on all sides of the blood vessel.
- ▶ **Saccular** - Balloons out on one side of the blood vessel (more concerning)



**Normal
Vessel**



**Fusiform
Aneurysm**
(more common)



**Saccular
Aneurysm**



Aneurysm Locations

Thoracic Aortic Aneurysm (TAA)

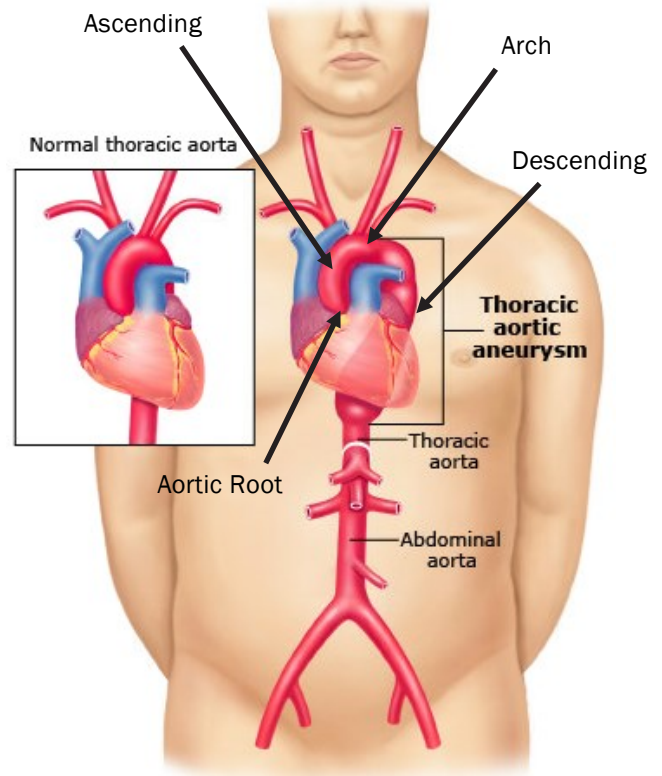
The thoracic aorta is the upper part of the aorta in the chest. It is broken down into **four parts**:

Aortic Root - the first part of the aorta containing parts of the aortic valve and connects the heart to systemic circulation

Ascending Thoracic Aorta - this is after the root and leads up towards the neck and arms

Aortic Arch - this part curves upward toward the head and neck and contains the vessels that supply the brain and both arms.

Descending Thoracic Aorta - This part leads downward through the chest towards the belly.



Abdominal Aortic Aneurysm (AAA)

The abdomen is the **most common** location for an aortic aneurysm.

The abdominal aorta is the part of the aorta that is located in the belly (below the diaphragm). It branches to bring blood to the organs in the abdomen and the legs. Sometimes AAAs can extend down to the iliac arteries.

