











## What is aortic dissection?

**Aortic dissection** is a serious condition that happens when a tear forms in the inner wall of the aorta — the main blood vessel that carries blood from the heart to the rest of the body. Blood flows through the tear and separates the layers of the aorta's wall. If the outer layer also tears, it can be deadly.

Each year, five to 30 people per one million have an aortic dissection, and older men (60 years and older) are most at risk. The symptoms can look like other health problems, which may delay diagnosis. Finding and treating it early can improve the chance of survival.

## What to Look For

Symptoms of aortic dissection can feel like other heart problems, such as a heart attack. Common signs include:

-  Sudden, severe chest or upper back pain that feels like tearing or ripping and may spread to the neck or down the back
-  Sudden stomach pain
-  Fainting or feeling like you might pass out
-  Trouble breathing or feeling short of breath
-  Stroke symptoms like sudden vision problems, trouble speaking, or weakness on one side of the body
-  Weaker pulse in one arm or leg compared to the other side
-  Leg pain or weakness
-  Trouble walking

If you have any of the symptoms mentioned, tell your doctor right away. Ask if you should see a vascular surgeon. Finding and treating aortic dissection early is very important.

## Types of Aortic Dissection

Aortic dissection has two types based on where the tear happens:

- Type A is more common and more dangerous. The tear happens in the aorta near the heart or in the upper part of the aorta. The tear can spread down into the stomach area as the layers in the aorta separate and blood cannot reach parts of your body that need it.
- Type B happens in the lower part of the aorta, farther from the heart. This tear can also spread into the stomach area. You may or may not need surgery right away, depending on if it is cutting off blood flow to your organs.

Both types are very serious and can be life-threatening without fast treatment.

# Recognizing Aortic Dissection

Doctors use several steps to figure out if someone has an aortic dissection. First, they ask about your symptoms and health history. They want to know if you have sudden, really bad pain in your chest or back. Next, the doctor does a physical exam. They might find clues like different blood pressure readings in each arm or pulses that feel different in your arms and legs.

To be sure, doctors will order special imaging tests to be done at a hospital or imaging lab. The most common tests are:

- CT scans (a type of X-ray that shows detailed pictures)
- MRI (magnetic resonance imaging)
- Echocardiography (an ultrasound of the heart)

These tests help doctors see your aorta and find any tears or problems.

## Role of a Vascular Surgeon



Vascular surgeons recognize and treat aortic dissections. Vascular surgeons are the only specialists trained to diagnose and treat the full spectrum of vascular diseases. Vascular surgeons are trained to do emergency procedures that help blood flow again and save the arm or leg.

They can provide treatments, which typically include open surgery to repair the damaged blood vessel or stenting (placing a small metal tube inside the blood vessel to help keep it open).

## Treatment

Your doctor chooses the best treatment based on where the tear is located, how large the tear is, and your overall health. The goals of treatment for aortic dissection are to:

- ✓ Stabilize your condition
- ✓ Relieve symptoms
- ✓ Prevent serious problems
- ✓ Repair the damaged aorta if possible

In most cases, emergency surgery is needed, especially for Type A dissections. During surgery, the doctor replaces the damaged part of the aorta with a man-made tube called a graft. This helps blood flow normally again.

For Type B dissections, treatment may include:

- ✓ Medicine to control blood pressure and heart rate
- ✓ Close monitoring to watch for problems

Sometimes doctors use a less invasive procedure called stent grafting. This means placing a tube inside the aorta without doing open surgery.