Ritter Rules™

The Ritter Rules were created to educate on how to recognize, treat and prevent thoracic aortic dissection.

URGENCY: Thoracic aortic dissection is a medical emergency. The death rate increases 1% every hour the diagnosis and surgical repair are delayed.

PAIN: Severe pain is the #1 symptom. Seek immediate emergency medical care for a sudden onset of severe pain in the chest, stomach, back or neck. The pain is likely to be sharp, tearing, ripping, moving or so unlike any pain you have ever had that you feel something is very wrong.

MISDIAGNOSIS: Aortic dissection can mimic heart attack. Heart attacks are far more common than aortic dissection. But if a heart attack or other important diagnosis is not clearly and quickly established, then aortic dissection should be quickly considered and ruled out, particularly if a patient has a family history or features of a genetic syndrome that predisposes the patient to an aortic aneurysm or dissection.

IMAGING: Get the right scan to rule out aortic dissection. Only three types of imaging studies can identify aortic aneurysms and dissections: CT, MRI and transesophageal echocardiogram. A chest X-ray or EKG cannot rule out aortic dissection.

RISK FACTOR: Aortic dissections are often preceded by an enlargement of the first part of the aorta where it comes out of the heart, called an aortic aneurysm. If you have an aneurysm, you are at increased risk for an aortic dissection.

RISK FACTOR: A personal or family history of thoracic disease puts you at risk. If you or a family member is living with an aneurysm or if you have a family member who has had an aortic dissection, you are at an increased risk for thoracic aortic dissection. You and your other family members should be evaluated to determine if a predisposition for aortic aneurysm and dissection is running in the family.

RISK FACTOR: Certain genetic syndromes put you at risk. These genetic syndromes greatly increase your risk for thoracic aortic disease and a potentially fatal aortic dissection: Marfan syndrome, Loeys-Dietz syndrome, Turner syndrome and Vascular Ehlers-Danlos syndrome.

RISK FACTOR: Bicuspid aortic valve disease puts you at risk. If you have a bicuspid aortic valve (two leaflets instead of the typical three), or have had a bicuspid aortic valve replaced, you need to be monitored for thoracic aortic disease.

TRIGGERS: Lifestyle and trauma can trigger aortic dissection. It is possible to trigger an aortic dissection through injury to the chest, extreme straining associated with body building, illicit drug use, poorly controlled high blood pressure or by discontinuing necessary blood pressure medications. Rarely, pregnancy can trigger an aortic dissection. However, women with aortic aneurysms and connective tissue disorders who are pregnant are at higher risk of aortic dissection during late pregnancy and delivery and should be carefully monitored by a cardiovascular specialist.

PREVENTION: Medical management is essential to preventing aortic dissection. If you have thoracic aortic disease, medical management that includes optimal blood pressure control, aortic imaging and genetic counseling is strongly recommended. Talk with your provider.

FromtheHeart
The John Ritter Foundation for Aortic Health™