

Thoracic Pathology Aortic Dissection and Aneurysms

The thoracic aorta (the main artery from the heart located in the chest) when diseased is a very dangerous clinical condition, that may compromise blood flow to many vital organs, or cause sudden death. A thoracic aortic aneurysm may be clinically silent, but may also cause chest and back pain. The risk of aneurysm rupture is high once if the aneurysm reaches a certain size. A tear in the inner lining of the aorta is known as a dissection and the pain may occur quite suddenly and be very severe as a tearing pain in the back and chest, this may be the result of extremely high blood pressure, or inherited weakness in the aorta. In some ways the symptoms of dissection are very similar to having a major heart attack, and patients may experience:

- Sudden onset and severe pain in the chest or back often radiating down the arm.
- Fainting and unconsciousness.
- Abdominal and leg pains
- Symptoms of stroke.

Early diagnosis and treatment are essential to maximize the chances of survival. Aortic dissections may become chronic and lead to the formation of complex thoracic and thoracoabdominal aortic aneurysms. These are difficult conditions to be treated by experienced and specialized centres.

Investigations

- A complete history and physical examination.
- ECG, Echocardiogram.
- Blood Tests.
- Chest X-ray
- Computerized Tomography (CT) Scan
- Angiography.

Treatment

Treatment decision depends on symptoms, aortic size and complications. Treatment options may include:

- Conservative treatment.
- Open surgery.
- Endovascular Aortic Stenting.