

## Aortic aneurysms

The aortic aneurysm represents an abnormal, segmental increase of the diameter of the aorta. In the majority of cases, it is located in the abdominal aorta under the origin point of the renal arteries, but it can affect any segment of the aorta: the thoracic ascending aorta, the thoracic descending aorta, the aortic arch. The most frequent cause is arteriosclerosis that usually affects men over the age of 55. Sometimes, aneurysms can form as a result of a trauma. Certain people are predisposed to aortic aneurysms even when they are young. In this case, the most frequently affected is the thoracic aorta, especially the ascending one, which is situated next to the heart.

### The risk factors for aortic aneurysms are:

- Smoking
- Age
- Arterial hypertension
- Dysplasia

Most of the time it is randomly discovered, after an investigation for another condition: echography (abdominal, cardiac), x-ray, CT scan, NMR. The symptoms can be non-existent or due to the affection of the structures surrounding the aneurysm, generally through compression.

### Investigations:

- Ultrasound
- CT scan/CT angiogram/multi-slice CT
- Aortography
- NMR

The most severe complication is the aneurysm rupture. This is a dramatic event: over 50% of patients die before arriving at the hospital; the mortality rate in the first 24 hours can reach 76%.

The larger the aneurysm, the higher the risk of rupture; this is why it is extremely important to discover it in time and to monitor it periodically before reaching the critical size, when it can be treated through:

- Intervention: aortic endoprosthesis implantation
- Surgery: aneurysm repair