

Angina pectoris

Angina pectoris is usually characterised by retrosternal (it can also be epigastric) pain, described as a burning, oppressive, constriction sensation that is localised or that radiates towards the precordium, neck, mandible, shoulders, arms, forearms and further on towards the shoulder blades, the interscapular area.

In general, pain has specific characteristics in terms of duration (from 5 to 15-20 minutes), onset (effort, emotions, cold) and disappearance (sudden disappearance while resting, nitroglycerin). It can also be accompanied by dyspnoea (shortness of breath) and palpitations (irregular heartbeats).

The pain is not pulsating; it does not feel like a twinge or a sting; it is not affected by respiratory movements of the chest or the movements of the arms; it does not accentuate with palpation/pressure on the painful area and it does not diminish during food ingestion (liquid or solid).

Angina pectoris is caused by the significant narrowing of one or more coronary arteries.

Depending on the characteristics, angina pectoris can be of several types:

- **Stable angina pectoris** is characterised by pain and/or by the related phenomena that appear during effort, emotions, cold weather or rich meals. It can evolve into unstable angina, myocardial infarction or sudden death, at any time. It requires complex investigations and treatment and usually medication is insufficient.
- **Unstable angina pectoris** is characterised by pain and/or by the related phenomena that appear during progressively smaller efforts (aggravated effort angina), resting (Prinzmetal's angina). This condition also includes "de novo" angina, i.e. the occurrence of pain in patients who have no history of ischaemic cardiovascular disease. It requires emergency examination by a cardiologist. This disease is a sign of a severe coronary condition that will eventually cause a myocardial infarction without proper treatment that includes medication and surgery.
- **Microvascular angina** (cardiac syndrome X) is a particular type of angina that is characterised by angina pain in patients with apparently normal coronary arteries (without any lesions found during coronary catheterisation), but with irregularities of the coronary microcirculation.

Investigations

- Electrocardiogram (ECG)
- Echocardiography
- Stress tests: effort test, myocardial scintigraphy, stress echocardiography
- Coronary angiography (coronary catheterisation)

Treatment

The treatment for angina pectoris is very complex and it requires a combination of the following:

- Medication: antiaggregants, beta blockers/calcium blockers, nitrates, statin, anticoagulants and treatment of the risk factors (especially the treatment of arterial hypertension, diabetes mellitus and renal diseases);
- Interventional treatment (coronary angioplasty) and/or;
- Surgical treatment (aorto-coronary bypass).

The decision is not only influenced by the coronary lesions, but also by the presence of associated conditions, such as: valve disorders, diabetes mellitus, renal, neoplastic and digestive diseases etc.