

Troponin

Troponin is a regulatory protein that is important for contraction of the cardiac muscle. Approximately 3 hours after the heart muscle damage troponin level starts increasing in the blood.

Why the Troponin Test is Performed?

Troponin test is used to determine whether the chest pain was caused by ischemic damage to the heart muscle or not. The troponin is also used when initially no attention was paid to chest pain (even 10 days after the injury troponin still remains elevated in the blood).

How the Test is Performed and How to Prepare for the Test?

For the test a blood sample is needed without any special preparation.

What Abnormal Results Mean?

The normal range is <0.1 ng/ml.

Increased troponin levels suggest the myocardial ischemic injury.

If 12 hours after the pain onset, troponin level is not increased in the blood, then coronary artery lesions are unlikely.

Other pathologies, which may cause elevated levels of troponin:

- pulmonary thromboembolism
- coronary spasm
- cardiomyopathy
- myocarditis
- renal failure
- autoimmune myelopathy

The troponin level is also increased after:

- Cardiac angioplasty/stenting
- Heart defibrillation or electrical cardioversion
- Open heart surgery
- Radiofrequency ablation of the heart

Alternative Names

No alternative names

Useful Information

Troponin test is first performed when the patient with symptoms of a heart attack is admitted to hospital. After 6-9 hours the test is repeated.