



ST Elevation Durind Stresstest-a Stressfull Time for the Clinician.

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Abstract

Transient ST elevation during stress test can be associated with severe coronary artery disease. Here we report a patient with severe coronary artery disease who presented with significant reversible ST elevation during treadmill testing.

Introduction

Transient ST elevation can occur stress testing. Most of the patients have severe coronary artery disease. However exercise induced ST elevation has also been reported secondary to coronary spasm. Coronary slow flow -also called Cardiac syndrome Y have been reported in patient with exercise induced ST elevation. Here we present a patient without any cardiac risk factors, who developed reversible ST elevation on stress test.

Case Report

A 42 year old male with no cardiac risk factors presented with exertional angina class 2 since 3 weeks.

His ECG and cardiac enzymes were normal.

His echocardiogram was also normal.

However his Treadmill Test was strongly positive for inducible ischaemia.

He developed ST elevation in lead 3, avf, along with ST depression 1, AVL, V3-V5.

Coronary angiogram was performed.

Right coronary artery had mid 95% stenosis followed by RPL with ostio-proximal 80% stenosis. RPL was a short vessel.

He underwent PTCA to RCA with DES (3 /16 mm) with good results.

He was asymptomatic on followup.

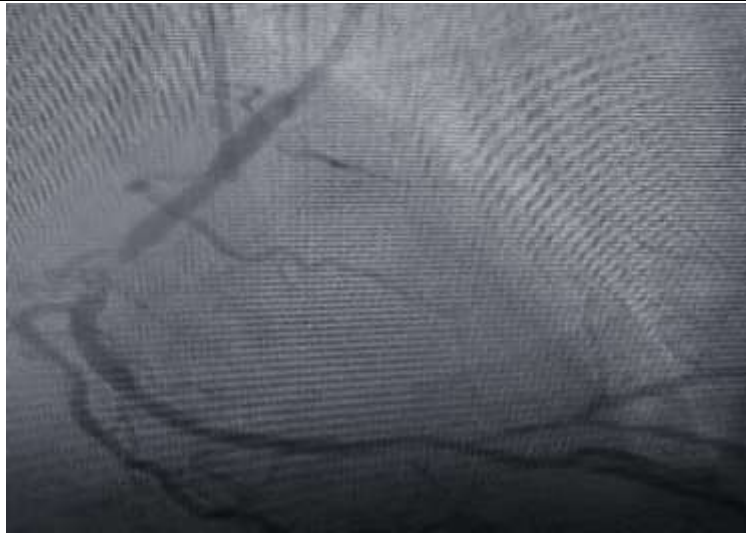


Figure 1

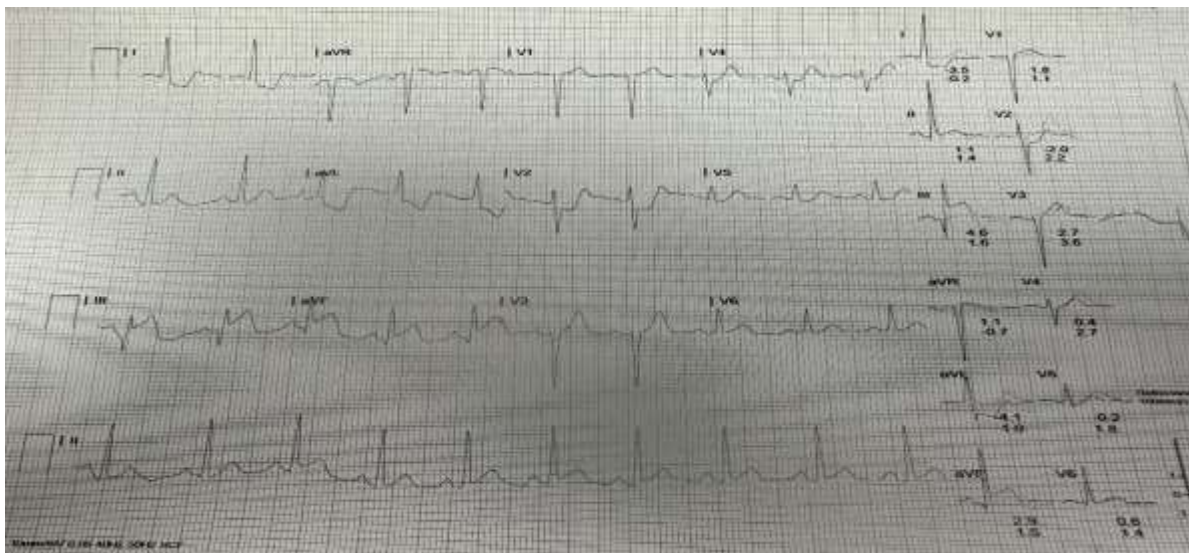


Figure 2: ST elevation TMT report

Discussion

The incidence of acute ST elevation during treadmill test is 0.78% in those without prior history of myocardial infarction. This is often associated with critical coronary obstruction. ST elevation during stress test has also been reported secondary to acute severe rise in pulmonary pressure and RV dilatation. ST elevation in AVR can be associated with left main stenosis. Without pathological q waves exercise induced ST elevation indicates significant proximal coronary stenosis or epicardial coronary

spasm. When pathological q waves are present exercise induced ST elevation is usually indicative of LV aneurysm.

Conclusion

Exercise induced ST elevation is an important finding during stress test which can signify significant coronary artery disease.

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