



Cardiac Syndrome Y-A Case Report

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Received: 13 October 2023

Published: 19 October 2023

Abstract

Coronary slow flow is frequently seen during Coronary Angiography. Here, we report an asymptomatic patient with positive stress test who had coronary slow flow.

Introduction

Coronary slow flow phenomenon (CSFP) is also called Cardiac Syndrome Y (1). This is characterized by absence of coronary obstruction and the presence of reduced TIMI flow grade of 2 on Coronary Angiogram. (2)

Here we present a patient who had a positive treadmill test on routine cardiac check-up. His coronary angiogram revealed coronary slow flow phenomenon.

Case Report

A 50-year-old male attended the Cardiology outpatient department for routine check-up including treadmill test for fitness to work in the desert. He did not have any cardiac symptoms. His clinical examination was normal.

His ECG was normal. His echocardiogram was normal.

However, his Treadmill Test was positive for inducible ischemia in stage III. In view of the positive stress test, he was initiated on cardiac medications, Aspirin, Clopidogrel, Atorvastatin and Concor. He subsequently underwent Coronary Angiogram which revealed coronary slow flow phenomenon.

Discussion

1 to 5% of diagnostic coronary angiogram show CSFP (2). Typical presentation of CSFP is in a young male smoker who presents with recurrent chest pain (3). The most commonly involved artery is left anterior descending artery followed by right coronary artery and the circumflex (4).

Coronary microvascular spasm has been cited as the underlying mechanism for coronary slow flow (5). Treatment with beta-blocker can be beneficial in patients with microvascular angina (6).

Conclusion

Patient was discharged on Aspirin, Beta-blocker and Statin. He remained asymptomatic in the follow up period.

Symptomatic patients with coronary slow flow have been reported previously. However, reports on asymptomatic patients with positive stress test caused by coronary slow flow are few.

It is important to consider coronary slow flow in asymptomatic patients with positive stress test.

Reference

1. Kopetz V et al – Endothelial function, oxidative stress and inflammatory studies in chronic coronary slow flow phenomenon patients. *Cardiology* 2012;121:197-203.
2. Beltrame JF, Ganz P- The coronary slow flow phenomenon in Kaski JC, Eslick GD, Merz CNB, eds chest pain with normal coronary arteries. A multidisciplinary approach .London, England: Springer.- Verlag; 2013: 101-117.
3. Paul L. C. et al. Coronary slow flow phenomenon. *Cardiovasc J. Afr* 2007;18: 385-386.
4. Finley J. J. Savage MP. Coronary slow flow phenomenon: more than just an angiographic curiosity. *Interv Cardiol* 2012;4: 337-347.

5. Martinez Pereyra et al – Microvascular spasm causes slow coronary flow. *JACC: case reports*. Vol. 2, No. 1, 2020, 35-9.

6. Ford T J. et al – stratified medical therapy using invasive coronary function testing in angina. The Cormica trial *J Am Coll Cardiol* 2018; 72: 2841-55.

