

Abstract

Characteristics of the patients with coronary slow flow syndrome (syndrome y)

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Introduction

Phenomenon of Coronary Slow Flow (CSF) is a rare clinical entity leading to angina, ischemic evidence in electrocardiography and cardiac scintigraphy. The functional and structural effects of CSF on the myocardium are yet to be understood.

Objectives

To evaluate the characteristics of patients with CSF phenomenon (syndrome Y)

Methods

Between January 2014 and December 2015, all consecutive patients scheduled for coronary angiography and diagnosed with the CSF phenomenon were included. CSF was diagnosed based on the Thrombolysis In Myocardial Infarction (TIMI) frame count (TFC). A TFC > 27 indicated the diagnosis of CSF phenomenon.

Results

Among 3250 patients scheduled for selective coronary angiography, 34 (1.05%) met the CSF criteria. The mean age of the sample was 51.2 ± 8.8 years and 61.8% were males. Risk factors were diabetes mellitus (11.8%), hypertension (41.2%) and dyslipidemia (20%) while presentation was stable angina (45%) and acute coronary syndromes (55%). The mean ejection fraction of the sample was $55.9 \pm 8.9\%$. Prevalence of CSF in triple vessels was 35.5%. There were 20.6% with slow flow in Left Anterior Descending (LAD) & Left Circumflex (LCX), 23.5 % with slow flow in LAD & Right Coronary Artery (RCA) and 2.9% with slow flow in LCX & RCA. The LAD was involved in 97% of cases, whereas RCA and LCX were involved in 61.8% and 58.8% of cases respectively. Isolated LAD CSF involvement was observed in 17.6% patients. The mean corrected TFC of LAD was 45.7 ± 11.8 .

Conclusion

CSF phenomenon is an uncommon finding in patients with angina. Triple vessel involvement is seen more frequently among the affected and LAD is the often involved vessel. This highlights the need of further exploration pertain to the clinical cause of these patients in future follow-up studies.

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