Single Coronary Ostia Arising from Right Coronary Sinus

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Introduction

A single coronary artery (SCA) is a rare congenital anomaly of the coronary arteries, which is described as one coronary artery arising from the aortic trunk by a single coronary ostium and providing for perfusion of the entire myocardium.¹² The prevalence of SCA is approximately 0.024%¹ to 0.066%² in population who undergo coronary angiography.

Most coronary anomalies are asymptomatic and incidental findings. We report a case of single right coronary artery with congenital absence of left coronary artery.

Case

A 64-year-old male patient was referred to our hospital for atypical chest pain for one month, without palpitation, syncope, and nocturnal dyspnea.

Patient was a non diabetic normotensive male with no addictions.

Physical examination revealed a well-nourished male with a blood pressure of 130/76 mmHg and a pulse rate of 66 beats per minute.

The myocardial enzymes and blood lipid levels showed normal findings.

Transthoracic echocardiogram was normal with an ejection fraction of 60%.

Stress test was terminated at 6 minutes due to chest pain that relieved on rest but with no significant electrocardiogram changes.

A coronary angiogram was performed to rule out coronary artery disease.

Angiogram revealed single coronary ostia arising from right coronary sinus with a long left main artery with a mid shaft lesion of 40% and a small calibre left anterior descending artery proximal 80% lesion (Figures 1-3).

Patient was advised CT coronary angiography to rule out an intraarterial course of the left coronary artery.

Patient was started on optimal medical treatment and treated as a case of chronic stable angina.

References