

Abstract

Pattern of atherosclerotic coronary artery stenosis among the patients with coronary artery ectasia

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Introduction

Coronary Artery Ectasia (CAE) is a dilatation in the coronary artery where the aetiology is essentially unknown and it may have an association with coronary atherosclerosis.

Objectives

To evaluate the pattern of atherosclerotic coronary artery stenosis in patients with CAE.

Method

A retrospective cross-sectional study was conducted at Cardiology Unit Kandy from January 2015 to April 2016 with the coronary angiograms of patients presented with acute coronary syndrome (ACS). Angiograms were reviewed by two examiners individually.

Results

There were 2.27% (n=50) patients (Mean age=52.96±8.75) with CAE among 2200 coronary angiograms. Majority were males (86%). There were 40%, 32% and 12% with hypertension, diabetes and dyslipidaemia respectively. There were 26% with dilated coronaropathy (i.e. ectasia without coronary obstruction). CAE was seen frequently (66%) in the right coronary artery (RCA). Ectasia of Left Anterior Descending artery and Left Circumflex were seen in 52% and 48% respectively. Severe generalized CAE [Markis classification type I] was seen in 26%, and type II, III and VI were found in 16%, 20% and 38% respectively. There were 42% having atherosclerotic stenosis (>70%) in the same ectatic artery and 9% had stenosis in the non ectatic artery. Out of the ectatic RCAs, 3.03% and 9.09% had proximal and distal segment stenosis of >90%. Severe stenosis was not observed in those with ectatic mid RCA. Among those with Markis type I, 46% had >90% of stenosis in the affected segments.

Conclusion

Concomitant CAE and significant atherosclerosis is a frequently observed phenomenon in patients with ACS. Dilated coronaropathy is an entity requiring further exploration.

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