

# Journal of Basic and Clinical Cardiovascular Research

Genesis-JBCCR-1(1)-1  
Volume 1 | Issue 1  
Open Access

## Giant Coronary Aneurysm: A Case Report

Amey Beedkar<sup>1\*</sup> and Harshwardhan Bora<sup>2</sup>

Department of Medicine and Cardiology Kingsway Hospital Nagpur, India

\***Corresponding author:** Amey Beedkar, Department of Medicine and Cardiology Kingsway Hospital Nagpur, India

**Citation:** Beedkar A, Bora H. (2022) Giant Coronary Aneurysm: A Case Report. J Basic Clin Cardiovasc Res. 1(1):1-3.

**Received:** May 19, 2022 | **Published:** June 15, 2022

**Copyright** © 2022 by Beedkar A. All rights reserved. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

Coronary artery aneurysms are extremely rare entity in coronary artery disease. Data are lacking to guide management strategy. The case we intend to describe here is of 46 years old male without any risk factors who presented with SIHD (stable ischemic heart disease). Coronary angiography revealed coronary artery aneurysm involving all the coronaries in variable severity. Only less than 50 cases of left main coronary artery aneurysm reported worldwide. The standard treatment strategy is CABG for such aneurysms, however for such clinical presentation in young patients, exact mode of treatment is not known.

### Keywords

Coronary artery; Aneurysm; Coronary artery aneurysms; Angiography

### Introduction

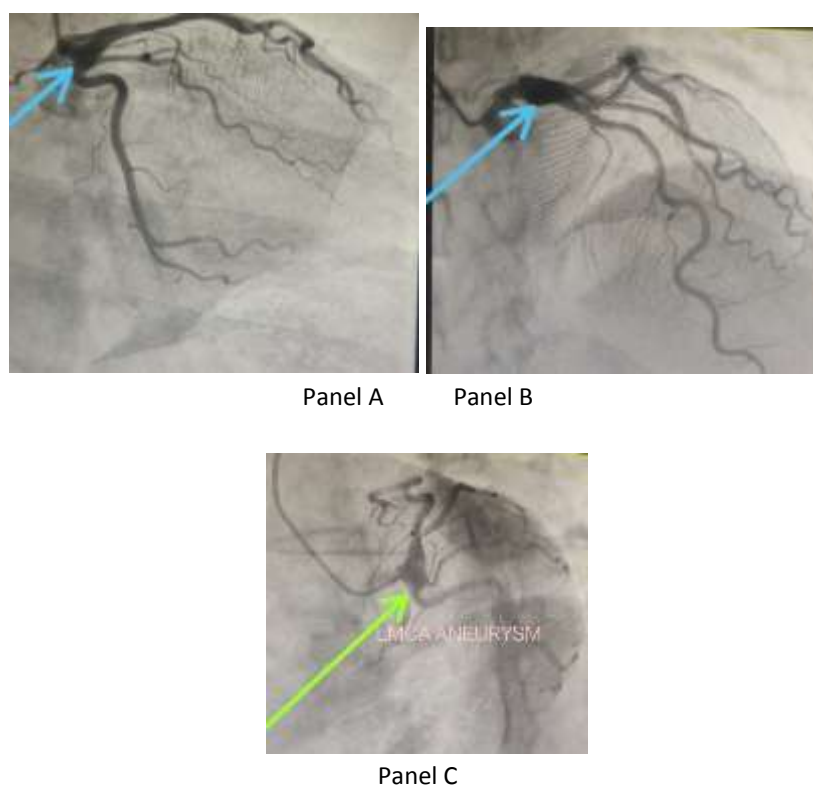
Coronary aneurysms involving left main are extremely rare. We describe a case of 46 years old male with SIHD. CAG revealed coronary artery aneurysm which was involving left main coronary artery. Less than 50 cases reported worldwide, most cases deal with non-atherosclerotic causes of left main coronary artery aneurysm. We describe a case of atherosclerotic left main coronary artery aneurysm.

### Learning objective

Coronary artery aneurysms is imperfectly understood and needs more evidence based scientific approach to guide their management. The cases are extremely rare, and therefore complete scientific data cannot come from single centre. Hence, reporting of even isolated case in is important and will help medical field.

### Case Report

We describe a case of 46 year old male, who presented as SIHD in our quaternary care centre in OPD at Kingsway hospital. His resting electrocardiogram and 2 D echocardiography with Doppler study was within normal limits. Rest of the workup revealed normal complete blood counts, HbA1c, lipid profile, renal and liver function tests. Patient was posted for invasive coronary angiography in view typical angina. Coronary angiography revealed giant left main coronary artery aneurysm with diffuse ectasias in all the coronary arteries. Patient was asked to undergo coronary artery bypass grafting, however, Patient and their relatives refused for surgery. At present he is on medical management with close observation. Currently, patient is doing well and is symptom free till now (Figure 1).



**Figure 1:** Figure shows giant aneurysm of left main coronary artery in panels A, B and C in different projections.

### Discussion

Coronary artery aneurysm occurs in 1.5–4.9% more common in males than females and a involves the right coronary artery frequently, however left main coronary artery rarely involved [1]. Atherosclerosis

accounts for 50% of coronary aneurysms in adults [2], Thrombosis and distal embolization, rupture and vasospasm are few known complications. Hence treatment advised is coronary artery bypass grafting even in asymptomatic patients [3]. Aneurysms involving left main coronary artery are very rare. Data regarding such aneurysm in general population regarding their clinical presentation, mean time to diagnosis from presentation, associated comorbidities, involvement of other vessels in the body such as cerebral, renal or peripheral, treatment given and long-time symptom free survival after treatment is lacking. This case report is intended to help literature in building such vital data.

### **Conflict of Interest**

Nil

### **Ethical Approval**

For this type of study formal consent is not required.

### **References**

1. Lenihan DJ, Zeman HS, Collins GJ. (1991) Left main coronary artery aneurysm in association with severe atherosclerosis: a case report and review of the literature. *Cathet Cardiovasc Diagn.* 23(1):28-31.
2. Topaz O, DiSciascio G, Cowley MJ, Goudreau E, Soffer A, et al. (1991) Angiographic features of left main coronary artery aneurysms. *Am J Cardiol.* 67(13):1139-42.
3. Ercan E, Tengiz I, Yakut N, Gurbuz A. (2003) Large atherosclerotic left main coronary aneurysm: A case report and review of literature. *Int J Cardiol.* 88(1):95-8.