

Clinical Profiles and Angiographic Characteristics of Coronary Artery Disease in Women: Insights From a Tertiary Care Center in Eastern India

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Abstract

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Abstract

Background: Due to the lack of awareness and attention to women's health, coronary artery disease (CAD) not only remains a formidable health problem for women in India but also is an under-diagnosed, under-treated, and under-researched disease worldwide. There is a paucity of studies elucidating the angiographic prevalence and pattern of CAD in women, especially from developing countries. This study aimed to characterize the clinical profile and angiographic features of women with CAD at a tertiary care center in Eastern India.

Methods: A hospital-based observational study was conducted over a period of 1.5 years. A total of 111 female patients above 18 years, diagnosed with CAD by electrocardiogram, cardiac biomarkers, and/or coronary angiogram, were included. Demographics, clinical features, and angiographic data were collected.

Results: The mean age of presentation was 55.8 years. 89.2% patients reported chest pain. The most frequent presentation was stable ischemic heart disease followed by ST-elevation myocardial infarction. Among angiographic findings, normal coronaries were observed in 26.1%, while single-vessel disease (SVD), double-vessel disease (DVD), and triple-vessel disease (TVD) were found in 22.5%, 21.6%, and 18% of patients, respectively. Left anterior descending artery (LAD) involvement was most common (40.8%), followed by right coronary artery (RCA) (29.6%) and left circumflex artery (LCX) (27.5%). SVD was the most common type of CAD in younger women, whereas in elderly women, SVD and DVD were more frequent.

Conclusion: The mean age of CAD in females in this part of India was younger compared to Western studies. Angina as a presenting symptom is less predictive of CAD in women; 26% of women presenting with symptoms of anginal pain had angiographically normal coronaries. LAD artery was the most involved vessel. In women with normal coronary arteries, a myocardial bridge was found to be one of the common causes of anginal pain.