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Study to assess the pattern of coronary artery disease (CAD) in Sagar town of Bundelkhand region, Madhya Pradesh

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Background

Globally, coronary artery disease (CAD) has assumed epidemic proportions. In 2015, CAD affected 110 million people and caused in 8.9 million deaths[(1)(2)] which is 15.6% of all deaths, making it the most common cause of death globally.[(2)] Once considered a disease of developed nations, CAD is now increasingly found in developing countries like India. According to Registrar General of India, CAD caused 23% of all deaths and 32% of all adult deaths in 2010-2013

Understanding the pattern of coronary artery disease (CAD) in a particular region is essential to plan development of necessary infrastructure to prevent and treat the patients of CAD. Not many studies describing pattern of coronary artery disease (CAD) among patients of bundelkhand region is available till now. To address this issue we studied the pattern of CAD among all coronary angiographies (CAG) done in our hospital (bhagyodaya tirth hospital) in Sagar, a major town of Bundelkhand, Madhya Pradesh.

Objective

To study the pattern of coronary artery disease in Sagar town of Bundelkhand region, Madhya Pradesh.

Materials and Methods

A total of 158 coronary angiogrphies (CAG) from 7/2/18 to 7/12/18 were studied retrospectively. Lesion severity of >50 % in main vessels (LMCA, LAD, LCX, RCA, RAMUS) was used as the criteria for significant CAD.

Results

Single vessel disease was found in 45 patients, Double vessel disease was found in 37 patients, Triple (or more) vessel disease was found in 45 patients. Slow flow without obstructive CAD was found in 6 patients and normal coronaries were found in 25 patients. Left Main Coronary Artery (LMCA) was found in 3 patients, Left Anterior Descending (LAD) disease was found in 101 patients, Left Circumflex (LCX) Disease was found in 67 patients, Right Coronary Artery (RCA) disease was found in 84 patients. Ramus intermedius (RAMUS) disease was found in 8 patients. LMCA/3VD was present in 48 (30.37%) patients who are much more than what was found in most of the western world studies.

Table 1

Coronary Artery Affected	Number of Patients
LMCA	3
LAD	101
LCX	67
RCA	84
RAMUS	8

Table 2

Number of Coronary Arteries Affected	Number of Patients
Single Vessel Disease (SVD)	45
Double Vessel Disease (DVD)	37
Triple Vesel Disease (TVD)	45
Non Obstructive Cad With Slow Flow	6
Lmca or Tvd	48
Normal Coronaries	25

Conclusion

Extensive CAD (LMCA/TVD) was found in much more proportion of patients than reported in previous studies. These findings suggest the need for planning and development of state of art treatment facilities to treat such patients.

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