COMPARISON OF CORONARY ARTERY DISEASE SEVERITY AMONG DIABETIC AND NON DIABETIC PATIENTS ADMITTED TO KHYBER TEACHING HOSPITAL, PESHAWAR

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Objectives: To compare the coronary artery disease severity in type-2 diabetic and non-diabetic patients suffering from coronary artery disease presenting to cardiology department of Khyber Teaching Hospital, Peshawar.

Methodology: This cross sectional study was conducted at Cardiology department of Khyber Teaching Hospital, Peshawar from 29th August 2015 to 17th March 2016. Non probability convenience sampling technique was applied. All patients admitted with acute coronary syndrome or previous known coronary artery disease who were candidate for angiography and revascularization and given consent were included. Patient with type I diabetes mellitus, valvular heart diseases, chronic kidney disease, Connective tissue disease, previous percutaneous coronary intervention (PCI) and coronary artery bypass graft (CABG) were excluded from study. Patient’s coronary angiograms were evaluated for lesions in coronary arteries, number of vessel involved and type of lesions, by two cardiologist with more than five year post fellowship experience first separately and then results were compared for final reporting in order to eliminate bias in reporting.

Results: It was noted that male diabetic patients with more were ten years duration of diabetes, smokers with 10 pack years and sedentary life style were more prone to have severe disease in coronary arteries. In diabetic patients severe disease was significantly higher in LAD (55.2% vs. 43%, p <0.01), RCA (63.3% vs. 38 %, p <0.002) and Left Circumflex (62% vs. 35%, p <0.003). Diabetic patients were found to have more extensive disease as compared to non-diabetics, so multi vessel disease was more common in diabetics as compared to non-diabetics (55.7% vs. 21.3 %, p <0.001). It was noted that Type C lesions were more common in diabetics (33.7% vs. 13.9 %, p <0.001). Diabetic patients were having more severe, diffuse disease multivessel disease in our study population as compared to non-diabetics.

Conclusion: Coronary artery disease is more severe, diffuse, aggressive with complicated lesions in diabetic patients having more than 10 years duration of diabetes along with ten pack years history of smoking, with sedentary life style.

Keywords: Coronary artery disease, Diabetes Mellitus, PCI, CABG


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