

51st CARDIOCON 2022: ABSTRACT**COMPARISON OF CLINICAL OUTCOMES OF CALCIFIED AND NON-CALCIFIED CORONARY ARTERY LESION INTERVENTION UNDER IVUS GUIDANCE -AN EXPERIENCE FROM A SOUTH ASIAN COUNTRY, PAKISTAN****Ihsanullah¹, Nasir Rahman¹, Ayesha Nasir¹, Ghufuran Adnan¹, Awais Farhad¹, Yawer Saeed¹, Maria Khan¹**¹Aga Khan University Hospital, Karachi

Objectives: Intralésional coronary artery calcification (CAC) is an important prognostic marker in terms of target lesion failure, target vessel revascularization and clinical outcomes. Intravascular ultrasound (IVUS) plays a pivotal role in the optimal management of calcified coronary arteries. We aimed to determine the clinical outcomes of IVUS guided intervention of calcified coronary lesions in a South Asian country.

Methodology: We retrospectively studied a total of 134 consecutive patients, who underwent IVUS guided assessment of coronary arteries from January 2013 to March 2020 at a single center. Patients were categorized into two groups: those with coronary artery calcification (CAC, n=77) and without coronary artery calcification (non-CAC, n=57). The mean duration of follow-up was 40.3 ± 30.1 months. The two groups were compared based on their clinical characteristics, management, in-hospital events, follow-up, and major adverse cardiac events (MACEs) that included cardiovascular death, non-fatal MI, life-threatening arrhythmia, bleeding, heart failure, stroke, and target vessel revascularization.

Results: A total of 134 patients were included who had undergone IVUS and were divided into two groups patients with CAC (n=77) and non-CAC (n=57). Majority of the patients were male (n=97 [72.3%]), the mean age at presentation was 63.1 ± 12.9 years. In CAC group the most common risk factor was Age of the patient then dyslipidemia (n=68[88%]) followed by hypertension (n=64[83%]) and diabetes mellitus (n=44[57%]), CAC group patients were more commonly presented with acute coronary syndrome (n=59[76.6%]), had prior PCI (n=40[52%]), had more LM disease (n=34 [44%], p=value 0.005), significant number of prior stent-ISR (n=27[47%]) p=0.024. Having CAC is associated with higher MACE (17 out of 26 events).

Conclusion: Patients with CAC have more comorbidities and more commonly present with acute coronary syndrome. MACEs were recorded higher in the CAC group although the results are not statistically significant.

Keywords: Coronary artery disease, acute heart failure, MACE, coronary artery calcification, percutaneous coronary intervention, pakistan

Citation: Ihsanullah, Rahman N, Nasir A, Adnan G, Farhad A, Saeed Y, Khan M. Comparison of Clinical Outcomes of Calcified and Non-Calcified Coronary Artery Lesion Intervention Under Ivus Guidance -An Experience from f South Asian Country, Pakistan. Pak Heart J. 2022;55(Supplement1):S26. <https://doi.org/10.47144/phj.v55iSupplement1.2442>

Corresponding Author: Ihsanullah, Aga Khan University Hospital, Karachi, Pakistan.