LETTER TO THE EDITOR

Non-Obstructing Coronary Artery Ischaemia, An Underdiagnosed Silent Killer

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Dear Madam, Ischaemia due to Non-Obstructing Coronary Arteries (INOCA), formerly known as Prinzmetal Angina, is a condition that affects a significant number of people, especially in Pakistan. I have encountered several cases where patients exhibit stable angina symptoms, despite having normal or near-normal coronary angiograms.

Among about 400,000 patients with suspected Ischaemic heart disease, the American College of Cardiology National Cardiovascular Data Registry found that only 37.6% had obstructive coronary artery disease, and 39.2% had no evidence of coronary artery disease. The exact prevalence of INOCA is not well-known.[1] Moreover, a prior research study found that heart failure patients of South Asian origin had a higher prevalence of INOCA compared to other populations.[2]

A recent meta-analysis revealed that approximately 50% of the patients with nonobstructive coronary artery disease had coronary microvascular disease (CMD) and/or coronary artery spasms, suggesting that a significant number of INOCA patients are not appropriately diagnosed in routine clinical practice.[3] This shows us the importance of INOCA and also suggests that we need to improve the diagnosis protocols that Pakistani physicians commonly use.

INOCA and myocardial infarction with non-obstructive coronary artery disease (MINOCA) are underrecognized and underdiagnosed conditions with cardiovascular health implications. These conditions are associated with a higher risk of death from cardiovascular causes in Pakistan, as well as a greater burden on the healthcare system, due to frequent hospital admissions for persistent chest pain and invasive coronary angiographies that often yield negative results. We have to dive more into Invasive coronary angiography by doing the Comprehensive Physiologic Assessment, using a pressure sensing guidewire to measure FFR (Fractional Flow reserve) and CFR (Coronary Flow Reserve) to evaluate Epicardial Stenosis and Microvascular Angina respectively. Later on, CFT can also be performed to confirm the diagnosis of coronary microvascular dysfunction.[4]

To ensure that we do not miss INOCA, we should also consider other tests that do not involve inserting a catheter into the heart. These tests include Transthoracic echocardiography, Cardiac MRI, and Cardiac PET. By doing these tests, we can determine if the patient has INOCA and what type of INOCA they have. These will help us to tailor our management plan in the best possible way and also help us to guide the patients on how to reduce their risk factors.

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