



Variant Angina in Chronic Kidney Disease: A Case Report of an Unusual Presentation of Cardiac Arrest Following Dialysis

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Abstract:

Introduction: Variant angina is an uncommon syndrome which is mostly benign, but carries a risk of serious complications.

Coronary vasospasm has been described in kidney diseases; however, its manifestations have not been elucidated. Also, haemodynamic changes occur during haemodialysis, but its acute effect on coronary circulation is not well understood. We report a rare case of variant angina (VA) in a patient with chronic kidney disease (CKD), presented with myocardial infarction (MI) and cardiac arrest secondary to ventricular fibrillation (VF).

Patient Information: A premenopausal female with CKD presented with acute coronary syndrome following haemodialysis. She complained of recurrent angina following haemodialysis sessions since few months which resolved with nitroglycerine. ECG revealed lateral wall myocardial infarction. Few minutes after admission, patient developed VF leading to cardiac arrest and was successfully resuscitated and shifted to the cardiac catheterization lab for

emergency percutaneous coronary interventions (PCI). Coronary angiogram revealed >90% stenosis in mid left anterior descending coronary artery (LAD). In view of typical history suggestive of VA and no obvious thrombus or dissection in culprit artery, vasospasm of LAD was suspected as the likely etiology. Ergonovine provocative test was not performed. Instead, intracoronary nitroglycerine was administered which led to complete resolution of ST elevation, relief in chest pain and a patent LAD with improved calibre. Over next 24 hours, multiple episodes of ST elevation and chest pain occurred, resolving with sublingual nitroglycerine. High dose calcium channel blocker therapy was initiated and patient had no further clinical events. She had undergone several uneventful haemodialysis sessions on treatment and is doing well.

Discussion & Conclusion: To our knowledge, this is the first reported case of patient with CKD having VA complicated by VF causing cardiac arrest. The association of coronary vasospasm following haemodialysis has also not been described. VA can angiographically mimic organic stenosis and should be kept in mind during primary PCI.

Biography:

Snehil V Mishra is an Adult Interventional Cardiologist and has completed all his medical education from public hospitals in Mumbai, India. He has worked as an Assistant Professor in the Department of Cardiology of Nair Hospital, Mumbai and has recently completed a Fellowship Course from Rambam Health Care Campus, Haifa, Israel, where he performed several complex coronary and structural heart interventions. He aspires to master the most recent advances in therapeutic interventions for the benefit of the population at need in his country who cannot afford medical treatment abroad. He believes that sharing and learning from clinical experiences of his colleagues can help everyone enhance their competence and help to provide optimum patient care.