

Prevalence of silent Ischemia in type 2 diabetes mellitus patients asymptomatic for coronary artery disease: A cross sectional study in rural population of Central India

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Abstract

Progressive CAD remains asymptomatic in many cases of type II diabetes mellitus (DM) and this makes diagnosis difficult at proper time. Routine screening of type II DM for silent ischemia with ECG remains controversial as majority of patients present with normal ECG. We are presenting a study focused on early detection of silent ischemia in type II DM patients among rural population of Central India by using TMT; where modalities such as coronary angiography and MDCT are not readily available and finance is a major issue. We also aimed at predicting risk factors for silent ischemia in this cohort. 161 DM patients with normal baseline ECG were screened by TMT using BPL Dynatrac software ver 3.8. 34 of 161 patients were positive for inducible ischemia. Of these, 27 underwent exercise stress echo immediately after TMT and presence of RWMA was confirmed in 20 patients. All TMT positive patients were advised to undergo coronary angiography. In present study, age, duration of DM, TC, TGs, TC/HDL ratio, poor glycemic control, diabetic retinopathy and nephropathy were the key predictors of silent ischemia and association of diabetic nephropathy is sensationally high with silent ischemia. In conclusion, although the study population was of low socioeconomic group with moderate to heavy working life style, the prevalence of silent ischemia and risk factors remained more or less similar to that of urban population and TMT emerged out as an effective screening tool for detection of silent ischemia in this cohort.