OUTCOME OF NEWER FIBRIN SPECIFIC THROMBOLITIC AGENT IN STEMI IN A COMMUNITY HOSPITAL OF NEPAL

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Abstract

Keywords: Tenecteplase, Coronary Angiography, Percutaneous Coronary intervention, Thrombolysis

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BACKGROUND: In the absence of contraindications, fibrinolytic therapy is administered to ST-elevation MI (STEMI) patients with symptom onset within 12 hours after diagnosis of STEMI in partly limited availability of primary percutaneous coronary intervention (PCI) hospital. Reperfusion treatment in acute STEMI represents the main indication for thrombolytic therapy in a community hospital set up.

OBJECTIVE: To study newer fibrin specific thrombolytic agent for the management of acute STEMI.

RESULT: In our study, we had 38 patients presented to the emergency department of Scheer Memorial Hospital and were diagnosed as STEMI presented within the window period. Among 38 patients, 18 were male (37-80 years) and 11 were female (45-82 years). All patients were in Killips class I-II. They did not have any contraindications for thrombolysis. Informed consent was obtained. They were thrombolysed with tenecteplase (TNKase) according to body weight. Successful thrombolysis was observed with post TNKase (after 90 minutes). Electrocardiograms were recorded to those patient treated. Successful thrombolysis was observed in both genders. Nine patients underwent coronary angiography (CAG) soon after thrombolysis. Out of nine CAG, three patients had single vessel disease, two normal CAG and four unknown. Three patients with complete heart block were sent to cardiac centre following TNKase. Three died in the hospital ICU. Four patients (> 75 years) had COPD, Pneumonia. Twenty-one patients are still living comfortably with LVEF: > 45%. Two died after two years follow up. Six patients are living with LVEF: <30%. Details of five patients could not be obtained. None of the patients had intracranial bleeding.

CONCLUSION: TNKase appears to be effective and well tolerated in the management of STEMI. TNKase is associated with reduced risk of major bleeding in patient treated for STEMI and has higher thrombolytic potency. TNKase is easy to administer and can be used in community hospital. The entire bolus dose is delivered over five seconds; no second dose is required, and gives very competitive result that can be expected for majority of patients present in first three hours of ACS at community hospital. TNKase offers timely reperfusion in community hospital to prevent the catastrophe in STEMI.

Biography:

Dr Shivaji Bikram Silwal is a Cardiologist working at Norvic International Hospital, Kathmandu (as Consultant Interventional Cardiologist) and Scheer Memorial Hospital Banepa (as Head, Department of Cardiology). He holds Master degree in Cardiology from Sun Yat-Sen University, China and has obtained interventional cardiology training from Medanta, The Medicity Hospital, New Delhi. He is one of the best known cardiologists in the country in the field of cardiac intervention. He has contributed significantly in the prevention of heart diseases in Nepal by increasing public awareness on cardiovascular diseases and associated risk factors. Dr Silwal is one of the most popular cardiologists in Nepali social media (facebook) also for his regular health tips. He has authored and
Co-authored many health informative articles in different national and international papers to improve medical knowledge for common people. Furthermore, he provides public awareness through National Heart Foundation-Nepal (www.nhfnepal.org.np) where he is a President.


Abstract Citation: