

A Comparative study of muscle symptoms of atorvastatin with rosuvastatin in patients of rtherosclerotic cardiovascular disease

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Statins are the corner stone therapy of atherosclerotic cardiovascular disease (ASCVD). Statin may cause myalgia, myotoxicity, myopathy and rhabdomyolysis along with its lipid lowering properties and pleiotropic effects. Statins associated muscle symptoms (SAMS) are the leading cause of nonadherent and discontinuation. This study was conducted to evaluate and understand the muscle symptoms of high intensity statin therapy (atorvastatin 40 mg and rosuvastatin 20 mg) for a period of three months in individual patient with clinical atherosclerotic cardiovascular disease. A total of 280 patients with clinical atherosclerotic cardiovascular disease were studied to once daily atorvastatin 40 mg and rosuvastatin 20 mg. It was a randomized controlled single blind trial. The primary end point was muscle symptoms-muscle pain, fatigue, cramp/spasticity and weakness at 4 weeks and in 3 months of study period. Serum creatinine kinase was measured in every patient with muscular symptoms. Patients of atorvastatin group noticed severe pain more than rosuvastatin group at the end of 4 weeks and 3 months of treatment period respectively. Significantly more patients felt extremely bad and bad with atorvastatin compared with rosuvastatin. Patients of atorvastatin group showed more marked increase muscle spasm than rosuvastatin group by spasticity grade.

Three patients of atorvastatin group developed grade 3 muscle power. Serum creatine kinase > 1500 U/L was observed more in atorvastatin than rosuvastatin group. Statin associated muscle symptoms (more severe muscle problem, myositis/myopathy) observed more in atorvastatin than that of rosuvastatin group. Both treatments were well tolerated. No cases of rhabdomyolysis, incident diabetes, hepatic or renal insufficiency were recorded during the study period. Rosuvastatin had better outcome profile of muscle symptoms than atorvastatin in patients with clinical atherosclerotic cardiovascular disease among the Bangladeshi population.

Speaker Biography

Md Rakibul Hasan Rashed has completed my Doctor of Medicine in (MD) in Cardiology in July, 2018 from Bangabandhu Sheikh Mujib Medical University, Dhaka, Bangladesh. He is acting as Assistant Registrar in Department of Cardiology, Rajshahi Medical College Hospital, Rajshahi, Bangladesh. He has over 6 publications that have been cited over 10 times. He is now working in a place where potential source of data exit regarding different medical issues, specially cardiology and endocrine subject. He has interest on research of medical science to contribute a bit in my sector.

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