

Statins Induced Myopathy Among Diabetes with Peripheral Neuropathy: Incidence, Etiology and Management

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OBJECTIVE

Statins induced myopathy and neuropathy are more pronounced in diabetes suffering from peripheral neuropathy. Lipid lowering drugs are indispensable for cardiovascular protection in diabetes. Myopathy is principal reason for statins non adherence and /or discontinuation. This study aims to answer what is the rate of incidence does statin undesirable effects myopathy affecting diabetes especially those with complication as neuropathy which aggravates it, etiology and best management (and alternatives) to profit statins benefits overcoming its risks.

METHODS AND RESULTS

In Cohort study, researchers identified patients age, sex, risk factors, cardiac status, laboratory analysis used patients case records to define all clinical courses of statin induced myopathy. Diabetes suffered from peripheral neuropathy complication used statins for cardiovascular protection who most of them complained from statins induced myopathy (muscles related symptoms).

Incidence of myopathy among diabetes with peripheral neuropathy was found =67.77%
Diabetes suffered from statins myopathy were 65%, among them 81% discontinued statin therapy as couldn't tolerate myopathy ...where, those tolerated myopathy were 35%.

Patients stopped statins were shifted to another statin where 68% of them experienced recurrent muscle pain, and 32% tolerated other statin without recurrent muscle symptoms. 3patients were hospitalised for

rhabdomyolysis management, one was sent to ICU. 1 patient with preexisting renal insufficiency began lifelong dialysis. Neuropathy pain is difficult to distinguish from statin or from diabetes complication. In one study, 26% over 65 years old develop peripheral neuropathy in life (without any known risk factor). That's third cause of those patients complaining from neuropathy.

CONCLUSION

Diabetes with peripheral neuropathy have 1.69 times higher risk to develop statin associated myopathy than diabetes without peripheral neuropathy.

Combination of statin and non-statin lipid lowering drug such as ezetimibe is recommended as it allows clinicians to decrease statin doses for patients while reaching LDL-C reduction and therapeutic goals. Also, Pharmacoeconomic benefits of cost effectiveness and clinical utility are gained. Rechallenge of recurrent myopathy when shifted to another statin, to overcome more hydrophilic statins are recommended as pravastatin, rosuvastatin and fluvastatin. Statin choice must be guided by pharmacogenetic patient study, which influences drug pharmacokinetics and pharmacodynamics. By evaluation of transporter function of OATP1B1 haplotypes, located on hepatocytes where statins are substrates and SLCO1B1 gene codes for..myopathy status is define, which is individually evaluated of greatest benefit with dramatically no undesirable effect. That is may be addressed in well-designed ongoing clinical trials.

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