

Statins Dangers and Kidney: A Need for Prescription Revision

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Letter to Editor

Dyslipidemia effects on renal include: glomerulosclerosis, vascular smooth muscle proliferation by macrophage infiltration, foam cell formation and cytokine secretion, all these mechanisms are similar to what happen in atherosclerotic vessel wall [1], and all these consequences convince us statins may be a renoprotective drug but in some studies statins side effects on kidney was shown in long term study with large size sample that revealed higher potency statins may be associated with higher rate of hospital admission because of acute renal failure [2] in another study it has been shown that renal side effects may be dose dependent with different hazardous risk among different statins types (1.3% at 40 mg of rosuvastatin) these effects cannot be considered as primary disease progression because these effects was not seen in other statins while in another study increase acute renal failure met in statins except for fluvastatin [3,4]. In a retrospective cohort study, Statins users had greater odds of acute kidney injury up to 30% and chronic kidney disease up to 36% and the authors suggested statins in long-term usage may show increase morbidity and mortality and increase incidence of CKD and diabetes mellitus due to statins usage [5]. Renal failure may occur in first 120 days of usage high potency statins: (≥ 10 mg rosuvastatin, ≥ 20 mg atorvastatin, and ≥ 40 mg simvastatin), this risk may be highest in the first year and remained high during first year of stopping treatment and then returned to normal 1-3 years after stopping treatment [2,4]. In ASUCA study renal function was evaluated more comprehensive and prospective, showed statins in mild to moderate dose cannot preventive for decrease GFR in 24 month in spite of controlling dyslipidemia and GFR in patients who used statins dropped more than control group after 18th month of statins usage with or without LDL-C over 140 or using RASS group drug as a renoprotective agent [1]. Statin effects as preventive for CKD in patients

with GFR under 60 and non-dialysis stage reviewed in a Cochrane Database Systemtic review in 2014 and showed Statin-related effects on stroke and kidney function were found to be uncertain and adverse effects of treatment are incompletely understood [6]. Statins cannot consider as a safe drug that prevent the harmful effects of dyslipidemia on kidney in short term or long term and should be remind JUPITAR trial [2] that show two years use of high dose statins in 450 case can prevent one death from vascular accidents, and we should justify benefits of high potency statins would outweigh the combined risk of acute kidney injury, rhabdomyolysis, and diabetes that enforce us to surveillance these side effects when we use statins.

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