

## SAFETY OF STATINS

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Statins the most widely used drugs in the market for lipid lowering purpose are considered to be as safe as they used to be considered in the past. Initially the side effects used to be considered as only myalgias and liver dysfunction but later on after a decade of its use more and more side effects of greater concern are coming up.

New Wall Street Journal in its Feb 12, 2008 issue pointed about Atorvastatin, a yard stick lipid lowering medication as a drug which might be helping patient's heart but actually putting their memory in jeopardy. In the article, Dr Orli Etingin, vice chair of medicine at New York Presbyterian Hospital, is quoted as saying that atorvastatin, the best-selling drug on the market, "makes women stupid." Etingin told the Journal that 24 of her female patients taking atorvastatin lost the ability to concentrate or recall words.<sup>1</sup> While tests showed nothing irregular, the women regained full cognitive capacity when the statin was stopped, and some women did better on other statins. The researchers, led by Dr. Beatrice Golomb (University of California, San Diego), are collecting anecdotal experiences of patients on statins. Muscle aches are the most commonly reported side effect, thus far, with memory problems the second most common side effect, in approximately 5000 reports to date.<sup>2</sup>

The Statins had been used extensively for primary prevention of CAD in past. When statins are used for primary prevention, there is a small lowering of future vascular events (stroke/heart attack) over 5 to 10 years. The absolute risk reduction is in the range of 7/1000. That means you have to treat 140 patients with a statin (for five years) to prevent one event. Or this: for 99.3% of statin-treated patients, there is no benefit. No statin drug has ever been compared with lifestyle interventions for the prevention of cardiovascular disease.

Studies are now coming up and have shown that Statin users are eating more and there is more trend towards weight in Statin users. While the eating habits of people who didn't take statins stayed pretty much the same, those who did take the cholesterol-lowering drugs gradually consumed more and more over time, according to a 10-year dietary study of nearly 28,000 U.S. adults published online in JAMA Internal Medicine. Statin users consumed 9.6 percent more calories and 14 percent more fat in 2009-2010 than they did in 1999-2000, and (not surprisingly) gained an average of 6.6 to 11 pounds.<sup>3</sup>

One of the latest emerging side effect is diabetes mellitus. Individuals taking statins had a 24% decrease in insulin sensitivity and a 12% reduction in insulin

secretion compared with those not receiving the drugs. These increases were again dose-dependent for atorvastatin and simvastatin.<sup>4</sup>

The risk was found to be dose-dependent for simvastatin and atorvastatin, which were taken by 388 and 1409 participants, respectively. High-dose simvastatin was associated with a hazard ratio (HR) of 1.44 for diabetes vs 1.28 for low-dose therapy, while the HR for diabetes with high-dose atorvastatin was 1.37. The study mentioned that people who are taking statins should always under strict check for diabetes. In the JUPITER, primary-prevention trial, the risk of developing diabetes mellitus with statin therapy is limited to patients already at a high risk for developing diabetes, such as those with impaired fasting glucose, metabolic syndrome, severe obesity, or raised hemoglobin A<sub>1c</sub> (HbA<sub>1c</sub>) levels.<sup>5</sup> However, in these high-risk patients, as well as in the entire study cohort, the benefits of statin therapy exceeded the risk of diabetes and should reassure physicians about the use of statins for the primary prevention of reducing MI, stroke, and cardiovascular death.<sup>6</sup>

The ultimate conclusion seems to be "People who are taking statins should keep taking statins, if there's an appropriate reason for them taking a statin. The risk/benefit ratio in most people is in favor of benefit; the risk is outweighed by that benefit,"

## REFERENCES

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