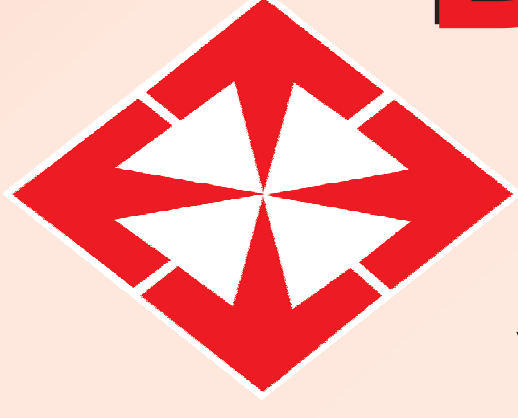
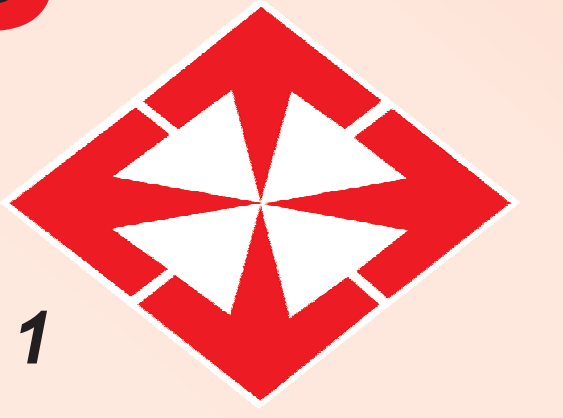


DOES STATIN USE IMPAIR GLYCAEMIC CONTROL IN TYPE 2 DIABETIC PATIENTS? A RETROSPECTIVE ANALYSIS



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While statins which are used safely to treat dyslipidemia, and improve cardiovascular mortality, recent articles claim that they also impairs glycaemic control in type 2 diabetes patients. Meta-analysis of larger scale studies indicate that use of statins is associated with an increase of 9% in diabetes onset. Despite that, we know not much about their effect on glucose regulation in patients already diagnosed with diabetes. Therefore we aimed to investigate the effect of statins on glycaemic control in a sample of patients applied to an outpatient clinic. Because of the longer diabetes duration of the study population, co-morbidities like hypertension and dyslipidemia were almost always existing in subjects. So that it was difficult to establish a control group of subjects who do not use statins. This fact led to a small size control group in this study. The statin treated group enrolled 119 patients, while the non-statin group consisted of 28 patients. Patients were using statins in intervals to manage the targeted LDL level (<100 mg/dL). In 79.8% of patients, the targeted LDL level was maintained. The mean age of the study population was 66.8±11.6 (31-93) years. Mean diabetes duration was 10.5±8.9 (1-49) years. Male-to-female ratio was 0.67:1. All statistical comparisons were made by adjusting both groups according to age, diabetes duration, medication for diabetes (metformin, sulphonylurea, insulin), anti-hypertensive medication including diuretics, beta-blockers, ACE inhibitors, and ARBs. Mean HbA1c percentages in the statin and non-statin group were 7.0±0.1 SEM and 6.4±0.2 SEM respectively (p=0.02). Mean follow-up duration of the whole study population was 44.3±35.4 (6-139) months with a median of 4 (2-7) HbA1c measurements per se. We conclude that besides increasing diabetes onset, statins also have a significantly negative affect on glucose control during routine follow up of diabetic patients. Because of the retrospective design of the study, we could not be able to form a homogenous group of patients that use just one type of statin drug. As literature mentioned that some statins appear to have adverse effect on glycaemic control, others appear to have neutral effect and possibly favourable effect. So further studies, which can evaluate statin effects in molecule based and dose dependent manner on glycaemic control in larger diabetic populations, are needed. Beside that in the meantime, the net cardiovascular benefits of statins, especially on diabetic patients, may favour the use of statin despite glycaemic dysregulating impact of statins.