Conclusions: We observed a significant synergistic effect between concurrently used statin and postmenopausal HT therapy in prevention of osteoporosis-related fractures.

291. Antiplatelet Therapy for Secondary Prevention after Ischemic Stroke among Elderly in Taiwan

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Background: Previous studies have established the role of antiplatelet therapy in secondary prevention after stroke in the western populations. However, the data for Asia populations are limited.

Objectives: The objective of this study was to investigate the effectiveness and safety of using antiplatelet agents for secondary prevention after ischemic stroke in an elderly population in Taiwan.

Methods: A population-based health claims database was used for this retrospective observational study. Patients > 65 years who had the first ischemic stroke related hospitalization during 2000–2005 were identified. Prescriptions of antiplatelet agents after discharge were extracted and the patients were followed for 2 years after discharge. The primary outcome was re-admissions with ischemic stroke, and the secondary outcomes were safety indicators of hemorrhage stroke and upper gastrointestinal bleeding. Time-to-event analyses with Cox proportional hazards models were used to analyze the outcomes, controlling for all covariates.

Results: A total of 68,057 patients met the inclusion criteria, and 75.86% were prescribed with at least one prescription of antiplatelet agents after discharge. The most commonly prescribed antiplatelet was aspirin (77.73%), followed by dipyridamole (36.27%), clopidogrel (16.53%), and ticlopidine (12.76%). Compared with no antiplatelet treatment, both aspirin and clopidogrel decreased the risk of recurrent stroke. There was no significant difference between clopidogrel and aspirin in preventive effect (HR = 1.06; 95% CI 0.94–1.20); however, clopidogrel had a higher risk of GI bleeding (HR = 1.39; 95% CI 1.19–1.63).

Conclusions: Antiplatelet treatment reduced the risk of recurrence of ischemic stroke among an elderly Asian patients. Clopidogrel and aspirin were equally effective; however, aspirin had better safety profile and should be considered as the first line of choice for this purpose.

292. Reducing Co-Payments of Essential Cardiovascular Medications

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Background: Reducing patient co-payments for prescription drugs may improve the use of essential medications. Little data supports this strategy. A U.S. employer recently eliminated co-payments for statins in patients with diabetes or vascular disease and lowered them for clopidogrel in all patients prescribed this medication.

Objectives: To assess the impact of reduced co-payments on the use of cardiovascular medications.

Methods: We measured the monthly proportion of days covered with statins and clopidogrel before and after the introduction of the co-payment policy in eligible patients (n = 3513) and compared them to an external control population (n = 49803). We used a repeated-measures design with generalized estimating equation. We also assessed overall rates of statin and clopidogrel use in both the intervention and control patients.

Results: Compared with controls, statin users in the intervention cohort were 3% more adherent immediately after co-payments were eliminated and subsequently had a 0.3% per month slower decline in adherence. 12 months after the policy was introduced, statin users in the intervention cohort were 7% more adherent than controls. Reductions in clopidogrel co-payments were associated with a 6% immediate increase in adherence but a greater decline in subsequent adherent, such that 12 months after the policy was introduced, intervention patients were 4% more adherent than controls. The new co-payment policy was associated with an immediate increase of 13 statin prescriptions per 1000 patients with diabetes or vascular disease and an increase of 0.7 clopidogrel prescriptions per 1000 beneficiaries.

Conclusions: Reducing co-payments for cardiovascular medications substantially improved medication adherence and use. The observed differences were larger for statins than clopidogrel, likely because of the extent of the co-payment reduction.

293. Effects of Phytosterols on Pattern and Effectiveness of Statin Use: Preliminary Results of a Post-Marketing Study

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Background: Statins are the cornerstone of the management of dyslipidemia and coronary heart disease. However, non-adherence to therapy remains a significant problem, leading to suboptimal therapeutic outcomes. Phytosterols have been suggested as a potential therapy to improve statin adherence, with evidence from randomized control trials showing that consumption of phytosterols improves statin adherence.

Objectives: To determine the impact of phytosterol consumption on statin adherence and effectiveness.

Methods: A post-marketing study was conducted in the Netherlands, where a large scale intervention trial with phytosterols was ongoing. The study included patients with dyslipidemia on statin therapy, and adherence was measured using electronic monitoring devices. The effectiveness of therapy was assessed by measuring changes in lipid profiles.

Results: A total of 120 patients were enrolled in the study. The mean duration of follow-up was 6 months. Adherence to statin therapy improved significantly in the intervention group compared to the control group (p<0.05). Additionally, there were improvements in lipid profiles in the intervention group, with a greater reduction in LDL cholesterol levels (p<0.05).

Conclusions: Phytosterols appear to improve adherence to statin therapy and have a positive impact on lipid profiles. Further research is needed to confirm these findings and explore the long-term effects of phytosterols on statin adherence and therapy effectiveness.

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