ASSOCIATIONS BETWEEN BASELINE LOW DENSITY LIPOPROTEIN CHOLESTEROL (LDL-C) LEVELS AND TREATMENT INITIATION OF SELECTED STATINS IN A MANAGED CARE POPULATION

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OBJECTIVES: Individuals who are not at ATP III (Adult Treatment Panel III) LDL-C goal are recommended to take statins along with lifestyle modifications. Due to different lipid lowering therapies (LLT) vary in their average LDL-C efficacy. The goal of this retrospective, observational study is to examine the association between initiation of selected statins and LDL-C levels before the prescribing in a cohort of CHD/CHD risk equivalents. METHODS: Using a large managed care administrative claims database, we identified individuals with at least one prescription for simvastatin plus ezetimibe fixed dose combination (simvastatin/ezetimibe), simvastatin, atorvastatin, or rosuvastatin between January 01, 2005 and December 31, 2006. Patients were excluded if they met any of the following criteria: use of any LLT during the 6 months prior (baseline) to the index (first prescription) date; prescription fills for more than one LLT on the index date; no lab value; or at LDL-C goal (<100 mg/dL) at baseline based on ATP III cholesterol guidelines. Three logistic regression models adjusting for age and gender were developed to examine the association between being ≥65% away from the ATP III goal at baseline and simvastatin/ezetimibe initiation (N = 22,661) relative to simvastatin (N = 2,615), atorvastatin (N = 5,703), and rosuvastatin (N = 1,446) monotherapy. RESULTS: A total of 13,651 eligible patients were treatment naive and not at LDL-C goal at baseline. Compared to individuals who were <50% away from the ATP III goal, patients who were 50% or more away from goal were 1.8 (95% CI = 1.6–2.1), 1.4 (1.2–1.5), and 1.1 (0.9–1.2) times more likely to be prescribed simvastatin/ezetimibe rather than simvastatin, atorvastatin, and rosuvastatin monotherapy, respectively. CONCLUSIONS: The positive association between being ≥50% away from LDL-C goal and initiation of simvastatin/ezetimibe vs. simvastatin or atorvastatin suggests that physicians were choosing simvastatin/ezetimibe because of the anticipated higher efficacy with this combination than the statin monotherapy studied.

A LONGITUDINAL ANALYSIS OF ANGIOTENSIN RECEPTOR BLOCKER (ARB) PRESCRIBING PATTERNS UNDER A PRIOR-AUTHORIZATION REQUIREMENT

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OBJECTIVES: Since the introduction of ARBs into the Israeli market in 2001, the Leumint Health Fund has enforced a prior authorization (PA) requirement for these relatively expensive drugs. We hypothesized that the trends in requests by physicians for these drugs would reflect the variance in the intensity of marketing campaigns for the different products over time. The objective of this study was to evaluate the trends in the patterns of requests for the ARBs available in Israel between 2001 and 2008, and to correlate the findings with available information describing the marketing campaigns that were concomitantly launched. METHODS: Data on all requests for PA approval for ARBs were retrieved for the relevant study period. The proportion of requests for individual drugs during each quarter of the eight years studied was calculated. The longitudinal trends in physician patterns for requests were analyzed to identify trends surrounding launch dates of new products, introduction of generic equivalents, and expiration of international marketing licenses. RESULTS: Initially, four different products were introduced into the market with 49% of requests for losartan, 19% for both valsartan and candesartan, and 13% for irbesartan. During the 3 month period in 2007 prior to the introduction of generic losartan when the drug was no longer being detailed, the proportion of requests for all drugs was: valsartan 58%, losartan 24%, candesartan 17%, and olmesartan 1%. Similar trends were identified for other drugs. CONCLUSIONS: Analysis of variance in the proportion of PA requests for drugs within a pharmacological category is a feasible method for monitoring physician prescribing behavior which may be strongly influenced by aggressive marketing. Under a PA constraint this method is preferable since dispensing data poorly reflects MD preferences due to the barrier created by PA.

Ten years follow-up of anti-hypertensive medications within the Slovak Republic

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OBJECTIVES: To analyse the utilisation of anti-hypertensive drugs within Slovakia between 1998 and 2007 and to assess the economic consequences of anti-hypertensive medications. METHODS: For 1998-2007, the data about consumption of drugs for cardiovascular disease were collected in accordance with ATC/DDD measurement unit. This analysis focused on the situation in anti-hypertensive medication in more detail. Data of wholesalers, who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for the analysis. RESULTS: A significant increase in the medication cardiovascular disease in 1998 (258.55), in 2003 (30.151) and in 2007 (510.73) in term of DDD/1000/day can be seen from this analysis. The results show that the consumption (in terms of DDD/1000/day) of β-blockers was in 1998 (31.21), in 2003 (41.40) and in 2007 (47.82). Agents acting on the rennin-angiotensin system in 1998 (39.16), in 2003 (48.88) and in 2007 (52.69). Ca-blockers (in 1998 (33.47) in 2003 (57.54) and in 2007 (71.78), Diuretics (in 1998 (27.17), in 2003 (32.56) and in 2007 (39.25), Peripheral vasodilators (in 1998 (21.14), in 2003 (20.64) and in 2007 (16.01), Serum lipid reducing agents in 1998 (7.34), in 2003 (12.19) and in 2007 (6.34). In financial terms, the consumption of β-blockers in 1998 (104,728,000) and in 2007 (16,422,000). Agents acting on the rennin-angiotensin system in 1998 (31,651,000) and 2007 (55,094,000), Ca-blockers in 1998 (14,496,000) and 2007 (21,624,000), Diuretics in 1998 (18,909,000) and 2007 (14,560,000), Peripheral vasodilators in 1998 (5,460,000) and in 2007 (5,252,000), Serum lipid reducing agents in 1998 (9,609,000) and 2007 (26,279,000) can be seen from this study. CONCLUSIONS: Usage of generic drugs for the treatment of cardiovascular diseases brought about a dramatic increase in drug consumption and the financial expenditures for health insurance funds have remained under control.