PCV65

PERSISTENCE WITH DIFFERENT FORMULATIONS OF THE ANTIHYPERTENSIVE DRUG NIFEDIPINE
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OBJECTIVES: To assess differences in persistent use of nifedipine between the different formulations of nifedipine.

METHODS: Incident nifedipine users were selected in the period of January, 1992 to December, 2001 from the PHARMO database which includes linked drug-dispensing records and hospital records of more than 1 million subjects in defined areas in The Netherlands. Patients with unaltered formulation and dosing frequency of nifedipine in the first year of follow-up with at least two dispensings were included in the study. Episodes of nifedipine use were constructed for each patient. The effect of formulation on persistence of use in the first episode with a maximum of one year was assessed using Cox's proportional hazard analyses. Other determinants of persistent use that were taken into account were hospitalization and co-medication before and during nifedipine use. RESULTS: A total of 7902 incident users of nifedipine were included. One year persistence for nifedipine varied between different formulations and increased from 18% in patients using a non-retard formulation to 33% in patients using retard formulations up to 45% in patients using Adalat® OROS. The median length of the first episode was 82 days for non-retard formulations, 148 days for retard formulations and 285 days for Adalat® OROS. Multivariate analyses including gender, age, co-medication and hospitalization showed that patients using retard formulations were 1.4 times (RR: 1.42; 95%CI: 1.31–1.53) more persistent than patients using non-retard nifedipine. Patients using Adalat® OROS were 1.8 times (RR: 1.84; 95%CI: 1.54–2.19) more persistent than patients using non-retard nifedipine. A separate analysis without non-retard formulations showed that patients using Adalat® OROS were 1.3 times (RR: 1.34; 95%CI: 1.23–1.46) more persistent than patients using retard formulations. CONCLUSIONS: Patients using once daily Adalat® OROS are more persistent with nifedipine therapy than patients using twice daily retard formulations of nifedipine or trice daily nifedipine.

PCV66

POOLED EFFICACY OF DISEASE MANAGEMENT PROGRAMS IN PATIENTS WITH CONGESTIVE HEART FAILURE—A SYSTEMATIC REVIEW
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OBJECTIVES: Hospital admission for CHF is an important public health problem. Although several randomized controlled trials (RCT) have successfully linked DMP’s to improved outcomes and reduced readmission rates, most effects are statistically not significant and vary regarding their magnitude. We sought to (1) systematically combine the evidence on efficacy of disease management programs (DMP) in the treatment of congestive heart failure (CHF); (2) identify reasons for the existing heterogeneity; and (3) identify publication bias. METHODS: We performed a systematic MEDLINE research on RCT’s investigating DMP’s for CHF treatment from 1966-May, 2004. We included all studies that were performed randomized, included the core curriculum of a DMP (i.e., patient education, medication optimization, follow-up after discharge), and reported mortality and hospitalization as outcomes. We performed a meta-analysis using random or fixed effects models depending on the statistical heterogeneity of effects and estimated the pooled relative risk (RR) with 95% confidence intervals (95%CI). We assessed effect heterogeneity using meta-regressions to identify the impact of covariates on the DMP effect size. Publication bias was assessed by inspection of funnel plots. RESULTS: Our analysis included 16 studies from 5 different countries with data from 2868 patients. A random effects model which compared DMPs vs. control groups yielded a pooled RR of 0.79 (95%CI 0.65–0.97) for mortality and of 0.87 (95%CI 0.79–0.95) for rehospitalization during DMP. Meta-regression analysis identified mean age, severity of disease (NYHA distribution), and duration of intervention as statistically significant variables explaining the heterogeneity. Funnel plot was asymmetric indicating a bias towards positive studies. CONCLUSIONS: DMP’s in the CHF treatment lead to a clinically relevant and statistically significant reduction of mortality and rehospitalization. Heterogeneity across studies could largely be explained by age, severity of disease, and duration of DMP. Our analysis may overestimate the true DMP effect, because of a potential publication bias.

PCV67

USE OF CLOPIDOGREL AFTER ISCHEMIC VASCULAR EVENTS IN THE NETHERLANDS
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OBJECTIVES: To assess the use of platelet aggregation inhibitors in patients who were hospitalised for ischemic events between 1998 and 2002. METHODS: Data were obtained from the PHARMO database, which includes linked drug-dispensing records and hospital records of more than 865,000 subjects in defined areas in The Netherlands. All patients hospitalised between 1998 and 2002 for ischemic heart disease (IHD), cerebrovascular disease (CVD), peripheral arterial disease (PAD) or having a percutaneous transluminal coronary angioplasty (PTCA), were included in this retrospective population based cohort study. The main outcome was the percentage of patients using different types of platelet aggregation inhibitors specified per indication within one month after discharge. RESULTS: In total, 18,646 patients were included in this cohort. In 2002, 66% of all patients with IHD, 61% of patients with CVD and 33% of patients with PAD were treated with platelet inhibitors. More than 80% of all patients with a first admission for an acute myocardial infarction or PTCA in 2002 were treated with platelet aggregation inhibitors. Clopidogrel use (including combined with aspirin) was most common in patients with IHD (15% of all patients in 2002) and limited in patients with CVD (5%) or PAD (2%). Clopidogrel (mainly in 2002) was almost only combined with ASA in patients with IHD (11% of all patients), especially in patients after PTCA (29%). CONCLUSIONS: There is still a considerable proportion of patients who do not use antiplatelet therapy after ischemic events. Clopidogrel use for secondary prevention in patients with ischemic vascular diseases seems to be rational given that guidelines recommend it for patients who can not be treated with aspirin. Clopidogrel plus aspirin is mostly used in patients with IHD treated with PTCA, suggesting that the current guidelines recommending this combination therapy in patients with acute coronary syndrome and after PTCA, are increasingly applied.

PCV68

POPULATION IMPACT OF LOSARTAN USE ON STROKE IN FRANCE
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