OBJECTIVE: The aim of the study was to evaluate the effect of the angiotensin receptor blocker eprosartan on pulse pressure as well as to identify those factors influencing such effect. METHODS: Observational, multicenter study performed in hypertensive patients attending primary care centers. Patients completed 12 weeks of treatment with eprosartan. Blood pressure was measured by means of a validated oscillometric device (OMRON 705CP) provided with a printer at beginning of treatment and at 4, 8, and 16 weeks. RESULTS: After 16 weeks, 3133 patients out of 4067 completed treatment (87% in monotherapy), mean age of 67 years (55% women). Components of blood pressure decreased: systolic blood pressure from 165.9 ± 15.5 mm Hg diastolic from 93.5 ± 10.4 to 80.6 ± 8.3 mmHg, mean blood pressure from 117 ± 9.3 mmHg to 100.1 ± 9.03 mmHg, pulse pressure from 72.5 ± 16.9 mmHg, PP decrease at 16th week was 4% higher to the decrease in MBP. The effect was more pronounced in older patients, those with higher basal PP/MBP and with target organ damage. Among adverse events reported, 35% affected to digestive system. CONCLUSIONS: Eprosartan is an effective and well tolerated antihypertensive drug able to reduce PP. This reduction is partially independent of the severity of high blood pressure. This aspect may be important in terms of safety and target organ protection.

PCV13

A SYSTEMATIC REVIEW AND META-ANALYSIS OF STUDIES COMPARING READMISSION RATES AND MORTALITY IN PATIENTS WITH HEART FAILURE

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OBJECTIVES: Heart Failure (HF) is the leading cause of hospitalization and re-admission in many hospitals worldwide. A number of small randomized trials have attempted to determine whether multi-disciplinary discharge programs aimed specifically at educating patients can reduce rates readmission and mortality rates. This meta-analysis evaluates the effectiveness of peri-discharge, multidisciplinary HF management programs.

METHODS: We identified studies through an electronic search of 4 bibliographical databases, our own files, references lists, the Cochrane review database, consultation with experts, reference lists, abstracts from meetings, interviews with authors and tracked down unpublished studies and studies in progress. Eligible studies met the following criteria: Randomized controlled clinical trials of adult inpatients hospitalized for heart failure enrolled at the peri-discharge transition period offered HF-specific patient education intervention coupled with a post-discharge follow-up assessment that reported unplanned readmission or mortality. For each study we determined the eligibility using a checklist that we developed through consensus and the quality using the Jadad (ref). Four authors independently assessed each study for eligibility agreement was rated using a weighted Kappa. For each study we calculated a relative risk ratio for readmissions and mortality for patients receiving enhanced education (Intervention) relative to patients receiving usual care (Control). RESULTS: A total of 529 citation titles were identified of which 8 randomized trials proved eligible. The pooled risk ratio (RR) for hospital readmission rates using a random effects model was 0.77; using a random effects model was 0.77, 95% confidence interval CI 0.68–0.84, p < 0.001 with a non-significant test for heterogeneity 0 = 0.25. There was no apparent effect on mortality, RR 0.98 CI 0.72–1.34, p = 0.9, with a non-significant test for heterogeneity p = 0.2. There was insufficient data to meaningfully pool intervention effects on quality of life or compliance. CONCLUSION: This systematic review suggests that specific heart failure interventions targeted at the discharge transition period significantly decrease hospital readmissions.

PCV14

EFFECTIVENESS OF SELF-MEASUREMENT OF BLOOD PRESSURE IN HYPERTENSIVE PATIENTS. DIOAMPA STUDY

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OBJECTIVE: Evaluate the effectiveness of self-measurement of blood pressure as a tool for hypertensive patient education to improve control of hypertension.

METHODS: One hundred eighty Primary Care Units (PCU) were randomized to two groups: 86 applied the intervention (I) and 94 collected data on Usual Clinical Practice (UCP). A medical doctor and a nurse composed all PCU. Patients included had Diastolic Blood Pressure (DBP) and Systolic Blood Pressure (SBP) above the recommended control levels (140/90 mmHg). Intervention consisted in provide OMRON HEM705CP blood pressure measurer to the patients during two visits: between the 6th and 8th week and the 14th and 16th week after the inclusion into the study, OMRON was recommended to be used during 15 days and was gave a handbook to the patients to register the results of self-measurements and delivered to the physician in the next visit. Blood pressure at PCU was measured in each visit (baseline, and 6, 8, 14, 16, and 24 week). The main criteria for effectiveness measurement was proportion of patients with DBP and SBP < 140/90 mmHg or <130/85 in diabetic patients. RESULTS: A total of 1325 patients (622 I, 703 UCP) with similar demographic characteristics were included by the 180 PCU. At week 8, the proportion of patients with blood pressure levels well controlled was higher in I group in 7.6% (p = 0.01) than UCP group. Nevertheless, differences among the groups were reduced to 4.1% favorably I vs. UPC (p = 0.27). At the end of the study (24th week) the difference in terms of effectiveness
between both groups was 4.9% (p = 0.19). CONCLUSIONS: Self-measurement of blood pressure has demonstrated its effectiveness in the control of blood pressure in hypertensive patients at short term, although its effectiveness is reduced after some time.

**PEV15**

**LOW GOAL ATTAINMENT IN COMMON DAILY PRACTICE AMONG PATIENTS WITH HYPERCHOLESTEROLEMIA IN THE NETHERLANDS: THE REALITY-PHARMO STUDY**

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OBJECTIVES: To study the determinants and effectiveness of lipid-lowering drugs with respect to lowering of cholesterol levels in routine daily practice. METHODS: Setting: Patient level data were obtained for all citizens who ever lived in the period 1991–2001 in a city in the centre of the country (N = 97,500) as part of 24 cities of the PHARMO system. Data included per patient measurements of plasma lipid levels (total cholesterol, low density lipoprotein cholesterol, high density lipoprotein, triglycerides) ordered by GPs or medical specialists as well as prescribed drugs, including lipid lowering drugs. Design: A follow-up study of patients who had records of lipid levels available and either started or did not start treatment with lipid lowering drugs between January 1991 and December 2001. Included patients had at least one baseline cholesterol measurement during the six months prior to the initiation of lipid lowering drugs and at least one cholesterol measurement after initiation. For these patients, use of lipid lowering drugs and levels of cholesterol were followed for a maximum period of five years with goal attainment as endpoint. Goal attainment was defined as total cholesterol below 5.0 mmol/l.

RESULTS: Our results indicate that only 30.2% of all treated patients achieved goals in the first year of treatment. The percentage varied from 17.7% to 41.7%, depending on dose and the prescribed statin. After the introduction of new guidelines in 1998, which advised to treat patients more aggressively, the percentage rose from 22% of those patients treated before 1998 to 42% for those in whom treatment was initiated after 1998. CONCLUSIONS: Although results from this study indicate that the selection of patients and the initial lipid lowering treatment for this cohort are in line with the national guidelines in the Netherlands, the percent of patients achieving guideline recommended goal is low in real-life even in patients treated with high dose statins.

**CARdiovascular disease—Cost Studies**

**PEV16**

**EFFECTIVENESS AND COST-EFFECTIVENESS OF THE AMBULATORY BLOOD PRESSURE MONITORING (ABPM) IN THE DIAGNOSTIC OF HYPERTENSION**


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OBJECTIVE: To evaluate the effectiveness and cost-effectiveness of the ABPM in the diagnostic of arterial hypertension in our region during 5 years. METHODS: Retrospective study of 1,845 registries of ABPM (1996 to 2000). Variables: age, sex, ABPM date, previous blood pressure (BP) measured at home or at office (OBP), previous diagnostic of hypertension, BP pre-ABPM, first BP with ABPM, day, night and 24 hours BP with ABPM and later therapeutic changes and cardiovascular events. Sensitivity (Se), specificity (Sp), positive (PPV) and negative (NPV) predictive values were calculated. Avoided cardiovascular events, ABPM costs and costs by one avoided cardiovascular event were also calculated using a sample of control subjects with hypertension but without ABPM.

RESULTS: In the whole sample the values obtained for ABPM vs OBP were: Se = 76.4%; Sp = 75%; PPV = 95.6%; NPV = 30.7%. In the group of patients with essential hypertension were 77.9%, 82.2%, 98.3%, and 21.6%. In patients with mild hypertension were 70.5%, 71.4%, 93.6%, and 29.1%. And for white-coat hypertension were 71.4%, 100% 100% and 12.8%. A therapeutic change was indicated in 42.4% of patients with essential hypertension, 100% of those with mild hypertension and 40% of patients with white-coat hypertension, when hypertension was confirmed. Therapeutic changes were also indicated in patients with no confirmation of the diagnostic: 42.8%, 16.7%, and 20% respectively. The number of cardiovascular events in the control group was 7.4%, in the patients with essential hypertension 14.9%, in mild hypertension 0% and in with white-coat hypertension was 10% (0% if therapeutic change was prescribed). The cost for one avoided cardiovascular event in the two latters was €563.11, and taking into account the mean costs of one cardiovascular event, it would be saved €3,420.96 for one avoided cardiovascular event.

CONCLUSIONS: ABPM is a good cost-effectiveness method for mild and white-coat hypertension.