and 60.9% were female. Of these 21,460 (72.8%) were treated with at least one AHY and 3584 (12.2%) were treated with three or more AHYs including a diuretic. Overall, 19,202 (65.6%) of the population had uncontrolled hypertension, and 2670 (9.1% overall or 12.4% of the treated population) had resistant hypertension. Resistant hypertension occurred in 70.9% of those treated with three AHYs including a diuretic and in 82.3% of those treated with four or more AHYs including a diuretic. The prevalence of diabetes and/or kidney disease was higher in patients with resistant hypertension (37.8% vs. 22.9%; p < 0.001). CONCLUSION: This study provides real-world evidence that resistant hypertension is a common treatment concern in the management of hypertension. Additional research to better understand patient characteristics, long term outcomes, and optimal treatment options in the management of resistant hypertension is warranted.

PCV15

SEASONAL VARIATION OF HEART ATTACKS IN WOMEN

Kriszbacher I[1], Bódis J[1], Vas B[1], Vas G[1], Sebestyén A[2], Gulacsi L[3], Boncz I[1]

[1]University of Pécs, Pécs, Hungary, [2]National Health Insurance Fund Administration, Budapest, Hungary, [3]Corvinus University of Budapest, Budapest, Hungary

OBJECTIVE: The onset of cardiovascular diseases, such as an acute myocardial infarction (AMI) shows certain circadian and seasonal variation. The development of vascular diseases may also be influenced by age and sex. The purpose of our study was to find out whether a weekly variation or a seasonal variation could be found in the occurrence of a heart attack in the group of women. METHODS: We have carried out a retrospective analysis among women with the diagnosis of AMI (n = 32,345) admitted to hospitals between 2000 and 2004 in Hungary, grouped in age groups below and above the age of 50. Data was collected from the data base of the National Health Insurance Fund Administration according to the International Classification of Diseases (ICD I21, I22). RESULTS: With consideration to seasonal variation, the peak period of AMI was during Spring, with the lowest number of events during Summer months. There was significant difference between numbers of events in each season (p < 0.01). The weekly peak period of AMI morbidity was found on the first day of the week, Monday; showing a gradually decreasing tendency until the last day of the week, Sunday (p < 0.01). No significant difference was found between the two age-groups regarding seasonal or weekly variation. CONCLUSION: In summary, the results of our study suggest that AMI incidence in women shows a characteristic variation regarding seasons and the days of the week, which should be taken into consideration in the development of prophylaxis strategies.

PCV16

PERMANENT STRESS MAY BE THE TRIGGER OF A HEART ATTACK ON THE FIRST WORK-DAY OF THE WEEK

Kriszbacher I[1], Bódis J[1], Betlehem J[1], Zsigmond E[1], Paska T[1], Sebestyén A[2], Gulacsi L[3], Boncz I[1]

[1]University of Pécs, Pécs, Hungary, [2]National Health Insurance Fund Administration, Budapest, Hungary, [3]Corvinus University of Budapest, Budapest, Hungary

OBJECTIVE: Numerous studies have reported the weekly variation of an acute myocardial infarction. The Monday peak has been connected with higher rate of physical and mental, work-related stress. We wish to study the weekly variation of an acute heart attack in the group of workers and pensioners, and find out whether National Holidays on the first day of the week influence the weekly rhythm of a heart attack. METHODS: We have carried out the retrospective analysis of patients received at Hungarian hospitals with the diagnose of an acute heart attack (n = 88,687) between 2000 and 2005. Data were retrieved from the data-base of the National Health Insurance Fund in accordance with the International Classification of Diseases (ICD). RESULTS: According to the morbidity data of a heart attack, the weekly peek is on the first workday of the week, showing a gradually decreasing tendency until the end of the week. Morbidity rates on Mondays being National Holidays are similar to the number of events on Saturdays and Sundays (Z = −25,337; p < 0.001). There was a significant difference between number of events on work-days and weekends (Z = −26,638; p < 0.001). No marked difference has been found between workers under the age of 65 and pensioners above the age of 65, or between the two sexes. CONCLUSION: The results of our study reveal that the occurrence of an AMI shows characteristic changes through the days of the week, and the first work-days of the week may be related with higher incidence of a heart attack. Such results urge finding the potential new methods of forecast and prevention.

PCV17

PREDICTING CLINICAL OUTCOMES IN MIXED DYSLIPIDEMIA PATIENTS USING THE FRAMINGHAM RISK AND A NEW RISK EQUATION BASED ON A MANAGED CARE DATABASE: A VALIDATION APPROACH

Burge RT[1], Balu S[1], Simko RJ[1], Quimbo R[2], Cziraky MJ[2]
[1]Abbott Laboratories, Abbott Park, IL, USA, [2]HealthCore, Inc, Wilmington, DE, USA

OBJECTIVES: To compare predicted coronary heart disease (CHD) events and lipid goal attainment under the Framingham and a managed care database risk equation in a managed care patient cohort with established CHD. METHODS: Independent outcomes models were developed from the Framingham-based risk equation (FR model) and from a risk equation using a large Integrated Research Database (IRD model). Prior CHD patients ≥50 years (distribution based on NHANES data) with combined sub-optimal LDL-C (≥100 mg/dL), HDL-C (≤40 mg/dL, males; ≤50 mg/dL, females), and TG levels (≥150 mg/dL) at baseline were modeled to predict CHD events and lipid goals attained over five years. IRD model covariates included age, gender, follow-up time, combined lipid goal achievement, and Deyo-Charlson co-morbidity index. CHD events included acute coronary syndrome, sudden coronary artery disease death, and cardiac catheterization (PCI). Patient therapy was based on a formulary with all major branded and generic lipid drugs. RESULTS: Using a hypothetical 1,000,000 member plan, 35,059 patients aged ≥50 years were identified with prior CHD. The percent of patients achieving LDL-C and TG goals over five years was higher in the IRD model versus FR model (68.9% vs. 62.7% and 69.9% vs. 49.2%, respectively), while HDL-C goal achievement percent was comparable (53.4% vs. 54.5%). The number of patients experiencing a CHD event over five years was higher in the IRD versus FR model (17,194 vs. 6387), reflecting the inclusion of actual practice CHD intervention (i.e., PCI) in unstable angina (14,430 vs. 1461). CONCLUSIONS: The established FR model appears to conservatively underestimate both lipid response and theoretical CHD events, nor does it account for CHD clinical intervention. The IRD model may better reflect the real world lipid response and CHD events, also accounting for actual event indicators of CHD intervention, being developed from a treatment population.