PCV28

USE OF DIURETICS IN SERBIA IN THE PERIOD FROM 2007 TO 2011 YEAR

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OBJECTIVES: Diuretics are drugs of first choice in the treatment of hypertension. The aim of this study was to analyze the consumption of diuretics in Serbia in the period from 2007 to 2011 year. **METHODS:** The data about the use of drugs were taken from the Agency for Drugs and Medical Devices of the Serbia. **RESULTS:** The use of diuretics during the observed period in Serbia is quite small and it ranged from 5 to 6% of the total consumption of all drugs from the C group. Furosemide was the most frequently used diuretic. In the five year period furosemide consumption ranged from 33-55% of the total consumption of all diuretics. The second largest consupmtion during first four years of the study is belonged to the indapamide. Indapamide consumption in the fifth year was at the fourth position. At the third position in drug consumption in the first four years was hydrochlorothiazide. Use of hydrochlorothiazide in 2011 took second place. Spironolactone has occupied the fourth position in the first four years. During the last years of the period spironolactone occupied the third position. Consumption of all other diuretics was small. **CONCLUSIONS:** In Serbia, in the observed period, consumption of diuterics is two to three times lower in comparison with the consumption of diuretics in Norway and Finland. This research was supported by Provincial Secretariat for Science and Technological Development, Autonomous Province of Vojvodina project No 114-451-2458/2011 and by Ministry of Science, Republic of Serbia, project no 41012.

PCV29

USE OF BETA BLOCKING AGENTS IN SERBIA IN THE PERIOD FROM 2007 TO 2011 YEAR

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OBJECTIVES: Beta blocking agents are drugs of first choice in the treatment of hypertension. The aim of this study was to analyze the consumption of beta blocking agents in Serbia in the period from 2007 to 2011 year. **METHODS:** The data about the use of drugs were taken from the Agency for Drugs and Medical Devices of the Serbia. **RESULTS:** During the observed period in Serbia the consumption of selective beta blocking agents were dominant. The most frequently used drug from this group was metoprolol. During this five years the consumption of metoprolol is in steadily decreased. In 2007. it was 37.73 DDD/1000 inh/day, at the end of 2011. year the consumption was 22.13 DDD/1000 inh/day. On the second place in drug consumption in the same group of drugs was atenolol. Atenolol also recorded a decline in consumption. On the third place in drug consumption was bisoprolol. At the beginning of 2007. consumption of this drug was very small, gradually grew and reached its maximum in 2011. From the unselective beta blocking agents the most frequently used was propranolol and his consumption in the observed years was constant. **CONCLUSIONS:** In Serbia, in the observed period the consumption of beta blocking agents been mostly constant. From all drugs in C07 group the most frequently used group of drugs was C07AB. This research was supported by Provincial Secretariat for Science and Technological Development, Autonomous Province of Vojvodina project No 114-451-2458/2011 and by Ministry of Science, Republic of Serbia, project no 41012.

PCV30

THE HUMANISTIC AND ECONOMIC BURDEN OF VENOUS THROMBOEMBOLISM IN PREGNANT WOMEN: A SYSTEMATIC REVIEW

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OBJECTIVES: To systematically review the humanistic and economic burden of pregnancy-related venous thromboembolism (VTE). **METHODS:** Pubmed, Cochrane Central Register of Controlled Trials, Econlit, Science Direct, JSTOR, Oxford Journals and Cambridge Journals were searched using combinations of a considerable number of relevant words. Humanistic studies published from January 2000 to December 2012 were eligible for inclusion in the review. The reference lists of all relevant papers retrieved from the original search were manually screened to identify additional studies. The identified studies were independently reviewed by two reviewers against pre-determined criteria. A quality assessment of the selected studies was also conducted by using standard methods. The data of selected studies were extracted onto a data extraction form and consequently synthesized. **RESULTS:** Twenty studies were included in our review. The overall pregnancy-related VTE incidence rate per 1,000 deliveries ranged between 1 and 1.72. This rate was higher in the postpartum period compared to the antenatal period. Events were spread across the 3 trimesters, with the majority of events occurring in the third trimester of pregnancy. Limited data is available on mortality due to pregnancy-related VTE, with one study reporting an overall mortality rate of 1.1/100,000 deliveries due to pregnancy-related VTE. Recurrence rate was found to be higher in the postpartum period compared to the pregnancy period. Poorer quality of life (QoL) was identified in women with pregnancy-related VTE in comparison to their counterparts with no VTE. Data regarding the economic burden of VTE in this specific population was lacking. **CONCLUSIONS:** The present systematic review showed that women are under a substantially increased risk of VTE events during pregnancy and VTE strongly affect their QoL. Despite the expected economic burden imposed by the pregnancy-related VTEs, no relevant studies were found. Therefore, further research is required to evaluate the humanistic and economic burden of VTE in pregnant women.

PCV31

IN-HOSPITAL AND LONG-TERM MORTALITY AND MORBIDITY BURDENS IN PATIENTS WITH ACUTE CORONARY SYNDROMES

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OBJECTIVES: To describe current real-world data on in-hospital/long-term mortality and morbidity outcomes in patients in the western world with acute coronary syndromes (ACS). **METHODS:** We conducted a review of publications from international registries: GRACE (Global Registry of Acute Coronary Events) and GRACE expanded (both worldwide); GRACE UK-Belgium; and EuroHeart survey II/III (Europe/Mediterranean basin). The most recent data on in-hospital/long-term outcomes were stratified by ACS type: ST-elevation myocardial infarction (STEMI) and non-ST elevation Acute Coronary Syndromes (NSTE ACS), which includes unstable angina (UA) and the non-ST elevation myocardial infarction (NSTEMI). **RESULTS:** In-hospital mortality rates were 4.6–7.8% in STEMI patients, 2.2–5.9% in NSTEMI patients, and 0.8–2.7% in UA patients. At 6 months post-discharge, mortality rates were 4.5–4.8% in STEMI patients, 6.2% in NSTEMI patients, and 3.6% in patients with UA. These rates increased to 19%, 22%, and 18% in STEMI, NSTEMI, and UA, respectively, at 5 years post-discharge. The most common morbidities were in-hospital congestive heart failure (STEMI, 11–15%; NSTEMI, 6.1–10%; and UA, 6%) and in-hospital myocardial (re)infarction (STEMI, 2–2.8%; and NSTE-ACS, 1.7–2.4%). Six months post-discharge myocardial (re)infarction rates were 2% in STEMI patients and 2.9% in NSTE-ACS patients, which are lower than previously reported in clinical trials. **CONCLUSIONS:** Despite current treatments, a substantial proportion of patients with ACS still suffer death and serious morbidities in the acute phase of the disease and longer term. Further research is needed to improve acute and long-term therapies.

PCV32

INTERRUPTION/BRIDGING OF VKA TREATMENT OF PATIENTS WITH ATRIAL FIBRILLATION: ANALYSIS OF INCIDENCE AND CLINICAL OUTCOMES BASED ON A GERMAN CLAIMS BASED DATA SET

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OBJECTIVES: For patients with atrial fibrillation (AF) undergoing a surgery, guidelines recommend the interruption of VKA-treatment combined with LMWH/UFH bridging. As a result, patients may be placed at higher risk for thromboembolic events during this time. This study investigates the incidence of such perioperative management situations and describes clinical event rates. **METHODS:** Claims data from a large German statutory health insurance (period 01/01/2007-31/12/2011) was analysed. AF-patients who started VKA-treatment within this period and continued ther-apy until 31/12/2011 were included. VKA-interruption/bridging was assumed when the patient was admitted to a hospital due to an inpatient surgical procedure (case 1) or the patient experienced an outpatient surgery, combined with an outpatient prescription of a LMWH/UFH within 10 days after surgery (case 2). Clinical events of interest were cardiovascular (strokes, TIA, embolism, myocardial infarctions) and bleedings leading to inpatient hospitalization. Daily event rates during regular VKA usage days were compared to those 5 days before/30 days after surgery ("interruption/bridging days"). **RESULTS:** 41,170 patients were included (mean age 74.8 years; 50.8% male; average CHA2DS2-VASc score 5.2). 11,695 (28.4%) VKA-patients experienced a hospital admission due to a surgery (case 1). 464 patients (1.1%) experienced an outpatient surgery with outpatient LMWH prescription (case 2). Overall (both cases) potential interruption/bridging occurred 0.24 times per person-year. The daily cardiovascular/bleeding event risk during potential VKA-interruption/bridging was about 10fold/25fold higher than during a regular VKA-usage day (0.08%/0.21% vs. 0.0078%/0.0083%, vs. ($p<0.0001$)). About half of the bleedings were coded by treating physicians as due to anticoagulation therapy. **CONCLUSIONS:** Periods in which VKA-interruption/bridging due to surgery was required frequently occur during the VKA-treatment of AF patients. The cardiovascular/bleeding event risk of VKA-patients is significantly higher during such periods compared to periods of regular VKA-treatment. Whether this is due to VKA-interruption/bridging or the surgical procedures themselves needs to be analysed in future.

PCV33

USING A CAUSE-OF-DEATH-BASED MORTALITY MODEL TO IDENTIFY THE INDIVIDUALS WHO WOULD BENEFIT MOST FROM PRIMARY PREVENTION WITH STATINS

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OBJECTIVES: To explore the use of a cause-of-death-based mortality model to identify those individuals most likely to benefit from taking statins for primary prevention of cardiovascular disease (CVD). **METHODS:** A cause-of-death-based, deterministic Markov model of all-cause mortality was developed. The baseline population average mortality rates for CVD, COPD, other respiratory disease, and cancer were adjusted by referencing individual risk factor values to population averages. Risk factors that were used as model inputs included cigarette consumption per day (CPD), systolic blood pressure (SBP), body mass index (BMI), total cholesterol (TC), and high density lipoprotein (HDL). A total of 11,520 scenarios were modelled encompassing all combinations of high and low values for these risk factors, in men and women, and younger (35 years) and older (65 years) age categories. **RESULTS:** Using an arbitrary threshold for a meaningful clinical benefit of 6 months' increased life expectancy per 10 years of treatment, individuals who are on the cusp of benefiting from statin therapy include: men aged 35 with SBP of 150 mmHg, BMI of 20 kg/m^2, smoking 15 cigarettes per day, with a TC:HDL ratio of 3.5; men aged 70 with SBP of 140 mmHg, BMI of 20 kg/m^2, smoking 10 cigarettes per day, with a TC:HDL ratio of 2.8; women aged 35 with SBP of 135 mmHg, BMI of 20 kg/m^2, smoking 15 cigarettes per day, with a TC:HDL ratio of 4.2 or higher; and women aged 65 with SBP of 140 mmHg, BMI of 30 kg/m^2, who are non-smokers, with a TC:HDL ratio of 4.2. **CONCLUSIONS:** The model facilitates decision-making about when to start preventive treatment and highlights that this is a multi-dimensional problem that renders rules-of-thumb inadequate in determining who most benefits from therapy.