PCV8

PATIENT PROFILE OF NEW USERS OF NOVEL ORAL ANTICOAGULANTS IN NON-VALVULAR ATRIAL FIBRILLATION (NVAF): REAL-WORLD EVIDENCE FROM PRIMARY CARE DATA IN GERMANY

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OBJECTIVES: Atrial fibrillation is the most common arrhythmia, affecting more than 4.5 million people in Europe. Owing to recent introduction of novel oral anticoagulants (NOACs) in Germany, there is a need to generate real-world evidence on the profiles of patients with NVAF prescribed with such therapies. This study aimed to describe demographic and clinical characteristics of patients with NVAF prescribed with different NOACs in Germany. METHODS: Retrospective study of patients with NVAF who were newly prescribed with NOACs (index prescription) between December 2012 and October 2014, using German primary care data from IMS Health calculated using a claims database of demographic and clinical characteristics in each NOAC therapy group. RESULTS: Overall, 2,678 patients initiated apixaban, 2,696 dabigatran, and 9,562 rivaroxaban in the study period. At time of index NOAC initiation, mean age was 75.9 years (standard deviation 10.0; interquartile range (IQR) 65-85) and 45.3% female. At baseline, 74.7% were on aspirin, 74.5% on antiplatelets, 43.5% on diuretics, 41.6% on cholesterol-lowering agents, and 37.4% on statins. Across all NOAC therapies, around half were men and approximately 80% lived in West Germany. Patients on apixaban had higher rates of stroke risk factors such as hypertension (88.2% vs. 86.4% and 85.4% for dabigatran and rivaroxaban, respectively), vascular diseases (61.3% vs. 57.2% and 58.5%), and congestive heart failure (43.5% vs. 36.9% and 40.9%); and higher rate of bleeding history (30.0% vs. 27.1% and 27.8%). CONCLUSIONS: In real-world clinical data from Germany, patients newly prescribed with NOACs were elderly and frequently had comorbidities of cardiovascular importance such as hypertension and vascular diseases. Patients on apixaban had higher rates of stroke risk factors and bleeding history, which are likely to impact treatment patterns and outcomes observed in this population. Future comparative effectiveness research across NOACs should account for channeling in patient profiles.

PCV10

TRENDS AND CORRELATES OF PULMONARY EMBOLISM IN HOSPITALIZED SPANISH PATIENTS

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OBJECTIVES: Trends in pulmonary embolism-related discharges and understand sociodemographic and seasonal factors correlated with a PE diagnosis among hospitalized Spanish patients. METHODS: Using hospital discharge data from the Encuesta de Morbilidad Hospitalaria we analyzed trends in PE-related hospital discharges in Spanish hospitals from 2008 to 2011. PE was defined based on principal diagnosis ICD-9 codes 41511 (Iatrogenic pulmonary embolism and infarct), 41512 (septic pulmonary embolism), 41513 (saddle embolus of pulmonary artery), and 41519 (other pulmonary embolism and infarction). The principal diagnosis was established to be the primary reason the patient was hospitalized. Results were stratified by age, sex, province and season of the year. We used log-binomial and logistic regression models to evaluate the relationship between these characteristics and a diagnosis of PE. RESULTS: Of the 18,317,000 hospital admissions over the 4-year period, 56,600 (0.31%) were primarily PE-related. The proportion of PE diagnosis of all hospitalizations remained steady, ranging from 0.28% - 0.34%. PE risk was similar among males and females; risk ratio (RR) 1.03 95% CI (1.01-1.04). PE-related hospitalizations increased with age however, rates were higher in men 65 years and younger than their female counterparts and higher in women 70 and older than their male counterparts. The greatest change (30% increase) in diagnosis from 2008-2011 was among 40-59 year olds and people over 80. We found a seasonal variation in PE diagnosis, with lowest rates of diagnosis in April to July in both males and females, over the 4-year period. PE hospitalization rates were two times higher in the northern than southern regions RB 1.82(1.76-1.88). CONCLUSIONS: Age, gender, geographic location and month of the year were correlated with diagnosis of PE among hospitalized Spanish patients. A future area of research is to clarify these relationships and determine possible interventions to reduce PE in these populations.

PCV11

COMPARATIVE EFFECTIVENESS OF TRIPLE ANTITHROMBOTIC COMBINATION THERAPY FOR PATIENTS WITH RESISTANT HYPERTENSION IN TAIWAN

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OBJECTIVES: Resistant hypertension (RH) is highly associated with cardiovascular risk factors. The number of patients at high risk of adverse effects of treatment of RH is expected to increase. This study aims to compare the effectiveness of triple antihypertensive combination therapy for RH patients in Taiwan. METHODS: Patients who had 3 antihypertensive agents of different classes concurrently pre-scribed by the treating clinician were identified. The Medical Insurance Database during 2004-2006 were identified as the RH cases from the National Health Insurance Research database. The 1st outpatient visit with 3 antihypertensive agents of different classes during the index date. Patients were further classified into two treatment groups according to the combination of antihypertensive therapy; the A+B+C group was defined as those who received concurrent therapy of ACEI/ARB in combination with beta-blocker and CCB, and the A+C+D group defined as patients receiving concurrent therapy of ACEI/ARB together with CCB and diuretics. The Cox proportional regression analysis was performed to investigate the risk of major adverse cardiovascular events (MACE) between the two treatment groups. Subgroup analysis was further performed by classifying patients with or without previous history of stroke, myocardial Infarction or end stage renal diseases. RESULTS: There were 15,551 patients identified as the prevalence cases of RH during 2004-2006. Results showed the A+C+D group had a lower risk of MACE compared to the A+B+C group (HR 1.12; 95%CI 0.99-1.28; p=0.0272). Subgroup analysis showed there was no significant difference in the risk of MACE between the A+B+C and the A+C+D groups either in patients with prior disease history (adjusted HR = 1.10, 95%CI 0.96-1.25; p=0.1891) or without previous disease history (adjusted HR = 1.12; 95%CI 0.99-1.28; p=0.0767). CONCLUSIONS: The A+C+D combination therapy seemed to be more effective than the A+B+C therapy in preventing MACE among patients with RH.