be effective in treating a highly prevalent, costly, and asymptomatic condition such as hypertension.

PCV122

IS PRESCRIBING JUSTIFIED BY THE EVIDENCE—COMBINATION OF ANGIOTENSIN-CONVERTING ENZYME INHIBITORS AND ANGIOTENSIN RECEPTOR BLOCKERS FOR TREATING HYPERTENSIVE OUTPATIENTS IN SOUTHERN TAIWAN

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OBJECTIVES: Angiotensin-converting enzyme inhibitors (ACEIs) and angiotensin receptor blockers (ARBs) have substantially contributed to the escalating antihypertensive drug cost in Taiwan. Increasing literature has proposed potential benefits of combining ACEIs/ARBs in controlling blood pressure, but there is still a lack of evidence to support the rationale of ACEIs/ARBs combination in treating hypertension. This study aims to explore the current utilization and prescribing patterns of ACEIs/ARBs combination in Taiwan. METHODS: A cross-sectional study was conducted from 2006 to 2008, using a regional reimbursement claim database from the Kaohsiung Division of National Health Insurance. Individual data of hypertensive outpatients treated with ACEIs or ARBs for more than 28 days per year in Southern Taiwan were extracted. Demographic and prescribing data were collected, and then descriptive analyses were used to evaluate patients’ characteristics and prescribing patterns of ACEIs, ARBs and their combination. WALD chi-square tests and Student’s t-tests were conducted to examine the prescribing associated variables and differences between the two drugs. RESULTS: During the 3-year period, prescriptions were assessed, including 44.69% (n = 2,003,278) ACEIs and 55.31% (n = 2,479,548) ARBs prescriptions. Of all, 1.22% (n = 54,526) prescriptions have either doubled or combined more than one ACEI. Likewise, 2.29% (n = 102,486) have doubled or combined more than one ARBs. Furthermore, 0.61% (n = 27,381) prescriptions combined both ACEIs and ARBs. The majority of these combinations were prescribed in medical centers in continuous prescriptions for long-term refills, and the amount of combined prescriptions increased annually. The major co-morbidity of ACEIs/ARBs combinations in diabetes mellitus (n = 97,517, 36.05%), and chronic renal disease (n = 105,535, 18.46%) and congestive heart failure (n = 886, 3.24%). CONCLUSIONS: We found a small proportion of ACEIs/ARBs combination, yet the combined prescriptions are increasing annually. The major co-morbidity of ACEIs/ARBs combinations was diabetes mellitus followed by chronic renal disease.

PCV123

DRUG UTILIZATION REVIEW OF DUAL ANTIPLATELET THERAPY AMONG TAIWANESE OLDER ADULTS

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OBJECTIVES: Upon the coverage limitations proposed by Taiwan National Health Insurance (NHI), the dual therapy with clopidogrel and aspirin would be reimbursed up to 9 months for specific indications since 2004. Although evidence showed its risks outweighed the benefits comparing to use aspirin alone, it is a lack of study examining population use of dual therapy. A secondary data analysis was performed to examine the use patterns of dual antiplatelet therapy (DAT) specifically among older adults in Taiwan. METHODS: A population-based longitudinal assessment was conducted using the 2003–2007 NHI databases. Those beneficiaries in 60 years old of age and greater during the study period were evaluated. All relevant data, including visits, toward physician, inpatient, outpatient visits, use of medications, and pertinent coverage cost in the datasets of ambulatory care were retrieved and analyzed. Descriptive analysis was performed to describe and compare the utilization of DAT for less or greater than 3 months (shorter vs. longer treatment). RESULTS: Of half million beneficiaries being evaluated, 1099 patients were prescribed DAT. Of which, 71% were older adults (age ≥ 71.8 years old). There was a sharply increasing utilization of DAT in 2007 for a total of 785 older patients. 85% were prescribed with approval indications (i.e., ischemic heart diseases) for aspirin or clopidogrel alone. 29.8% posessed with at least one atherothrombotic risk factors (DM, dyslipidemia), which might attribute to DAT. The duration of DAT was up to 13 months. The total drug expenses were 66% and 85% among shorter and longer treatment patients, respectively. The Cost of DAT accounted for up to 51% of total drug expense. CONCLUSIONS: There were sharply increasing utilization of DAT among Taiwanese older adults since 2007. Further studies are needed to explore the effectiveness and rationality of this combination.

PCV124

ANTIHYPERTENSIVE PHARMACOTHERAPY: PHYSICIAN PERSPECTIVES AND PRESCRIBING PATTERNS IN THREE SOUTH INDIAN HOSPITALS

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OBJECTIVES: The prevalence of hypertension is increasing in epidemic proportions in the Indian subcontinent. Despite the well known benefits of aggressive blood pressure control in hypertensive patients, data from the subcontinent indicate that the control of hypertension remains remarkably poor. Our previous study demonstrated that calcium channel blockers (CCBs) were the most prescribed agents for uncomplicated hypertension in three South Indian Hospitals. The objective of this study was to assess the physician’s perspectives with regard to antihypertensive pharmacotherapy and to determine whether they are in accordance to national and/or international hypertension guidelines. METHODS: A questionnaire was developed containing questions on familiarity with guidelines, diagnosis of clinical hypertension, and evaluation of patients without hypertension with or without co-morbidities and utilization of dual, triple, and quadruple therapy including choice of drugs, and drug regimens or specific drug combinations. The questionnaire was administered to internists and physicians of Medicine Department of three teaching-hospitals in South India. RESULTS: Among a total of 37 physicians who received the survey, 58.1% were internists and 41.9% were specialists. Whereas 12.8% were familiar with the Indian Hypertension Guidelines-II. Although majority of the physicians were aware of the guidelines about 37% of them indicated that they would prefer CCBs as the first drug for treating uncomplicated hypertension. Physicians’ combination therapy varied with the physicians chose a two-drug combination over monotherapy, CCB with ACE-inhibitors was the most favored choice followed by combinations of CCBs with beta-blockers and diuretics. CONCLUSIONS: The physician’s preference of CCBs and combination therapy over other antihypertensives and monotherapy may be attributed to the better treatment outcomes they experienced and is consistent with emerging trends observed in recent studies such the ACCOMPLISH and ASCOT trials that endorse the benefits of using combination therapy with CCBs as initial therapy for hypertension.