

PCV10

THE EFFECT OF INTERACTIONS BETWEEN CLOPIDOGREL AND PROTON PUMP INHIBITORS ON ADVERSE CARDIOVASCULAR OUTCOMES IN COMMERCIALY INSURED PATIENTS WITH ACUTE CORONARY SYNDROME

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OBJECTIVES: Following a FDA warning in November 2009, significant controversy exists regarding the outcomes of patients co-medicated with clopidogrel and omeprazole after acute coronary syndrome (ACS). This study examined the effect of proton pump inhibitors (PPI) – clopidogrel interactions on subsequent ACS emergency department and inpatient visits. **METHODS:** This was a retrospective cohort study of administrative claims data for a large nationally dispersed group of commercially insured subjects between 2001 and 2008. Subjects age >18 years with a diagnosis of ACS and at least one clopidogrel prescription within 90 days after the diagnosis were included. The clopidogrel plus PPI (C+PPI) group was defined as subjects with a minimum of 7 days overlap between the PPI and clopidogrel prescriptions. Subjects were followed from their first clopidogrel prescription until they experienced a re-hospitalization or ER visit due to ACS, disenrolled or reached the study end. C+PPI group was matched 1:1 with clopidogrel group using propensity scoring methods with calipers. Cox proportional hazards regression was used to estimate the relative risk of an adverse cardiovascular event. **RESULTS:** Of the 10,101 patients taking clopidogrel, 16.98% (n=1,716) were prescribed a PPI. Propensity matching resulted in 1,697 patient pairs. The mean age was 61.50 years with a mean follow up of 259 days and 69.64% were males. 13.20% (n=224) had an ACS-related re-hospitalization or ER visit in the clopidogrel group versus 16.32% (n=277) in the C+PPI group. C+PPI use was not associated with a significantly increased risk of adverse outcomes (HR=1.221; 95% CI, 0.984-1.517) compared to clopidogrel users not co-medicated with a PPI. **CONCLUSIONS:** Concurrent use of clopidogrel and PPIs trended toward a non-significant increase in risk of adverse cardiovascular outcomes for ACS patients, which suggests caution may be warranted when prescribing a PPI with clopidogrel. Future studies should account for time dependence of exposure.

PCV11

PNEUMONIA AFTER ACUTE ISCHEMIC STROKE: PREVALENCE, ASSOCIATED FACTORS AND OUTCOMES

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OBJECTIVES: Pneumonia is one of the most frequent medical complications of acute ischemic stroke, often apparent early after stroke onset, and it is associated with increased risk of death after stroke attack. We aimed to identify clinically useful factors associated with pneumonia, and to examine the effect of pneumonia on patient's functional outcome at discharge and on in-hospital mortality after the attack. **METHODS:** It is an evaluation of post-stroke pneumonia complication among ischemic stroke patients attending a hospital in Malaysia from November 1, 2008 to April 30, 2009. Data included demographic information, risk factors and clinical characteristics. Functional outcome at discharge as measured by the Modified Barthel Index (MBI) and in-hospital mortality were assessed. Poor outcome was defined as MBI < 75. SPSS version 15 was used for data analysis. **RESULTS:** A total of 256 patients were studied, of which 33 (12.9%) experienced pneumonia complication during hospitalization. The key baseline factors associated with the occurrence of post-stroke pneumonia were total anterior circulation infarct (P < 0.001), moderate and severe Glasgow Coma Scale (P < 0.001), atrial fibrillation (P = 0.035) and renal impairment (P < 0.001). Moreover, 24 (60%) of dead cases were suffering from pneumonia during hospitalization (P < 0.001). Additionally, after excluding the dead cases, 8 (9.2%) of patients discharged with poor functional outcome were having pneumonia during their hospital stay (P = 0.002). **CONCLUSIONS:** Pneumonia is independently associated with ischemic stroke poor outcome. Identification of medical history and clinical characteristics on admission can assist clinicians to identify patients at higher risk of developing post-stroke pneumonia thus hastening the initiation of certain interventions to improve patient outcome.

PCV12

IMPACT OF POTENTIAL DRUG-DRUG INTERACTIONS (DDIS) ON HEALTH OUTCOMES AND COST TO MEDICAID: THE MONETARY BENEFITS OF QUALITY HEALTH CARE

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OBJECTIVES: To examine the impact of potential DDIs on health outcomes and the associated cost to the Mississippi Medicaid program. **METHODS:** A retrospective matched cohort study was conducted in Mississippi Medicaid enrollees for years 2002-2004. Enrollees were classified as exposed to a potential DDI if the object and precipitant drugs were possessed concomitantly, with first day of overlap being the DDI event date. Exposed enrollees were matched to enrollees taking object drugs without a potential DDI based on demographic, comorbidity and object drug-related variables. Controls were assigned the event date for the matched exposed case. Conditional logistic regression was used to analyze the effect on health outcomes (hospitalizations and ER visits within 30 days of potential DDI) and paired t-tests for costs to Mississippi Medicaid. **RESULTS:** DDIs with the greatest health and economic effects included: ACE/ARBs — odds ratio (OR) for hospitalizations = 1.75, OR for ER visits = 1.39, difference in average per patient hospital payments (Δ APHP) = \$124, and difference in average per patient ER payments (Δ APERP) = \$63; beta blockers — OR for hospitalizations = 1.52, OR for ER visits = 1.24 (n.s.), Δ APHP = \$78.13, and Δ APERP = \$43.67; clonidine — OR for hospitalizations =

1.67, OR for ER visits = 1.35, Δ APHP = \$50, Δ APERP = \$8.17; warfarin with quinolone — OR for hospitalizations = 1.17 (n.s.), OR for ER visits = 1.27; Δ APHP = \$83.35, and Δ APERP = \$48.14; warfarin with thyroid hormones — OR for hospitalizations = 2.47, OR for ER visits = 1.96, Δ APHP = \$106.03, and Δ APERP = \$100.33. **CONCLUSIONS:** Based on these findings, Medicaid intervention strategies to reduce the incidence of potential DDIs should be a cost-effective method for improving health care quality and thus a priority for state Medicaid programs.

PCV13

BURDEN OF COMORBIDITIES AMONG PATIENTS WITH ATRIAL FIBRILLATION

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OBJECTIVES: Atrial fibrillation (AF) may manifest with comorbidities. We examined the prevalence of comorbidities and general medication use among AF patients in order to assess total disease burden. **METHODS:** Data were obtained from the 2009 National Health and Wellness Survey (N=75,000), an annual cross-sectional Internet-based survey of adults in the United States. In addition to demographics and medication use, patients with AF also reported on their comorbid conditions. Using demographic and patient characteristics, a CHADS₂ score (an index of stroke risk) was calculated for each patient. **RESULTS:** A total of 1297 patients reported a diagnosis of AF. The mean age was 64.9 years (SD 12.2), and 65% were male. In addition to AF, these patients reported comorbidities in various organ systems, including 90% with a cardiovascular condition, 62% with a urological condition, 42% with a respiratory condition, and 41% with a gastrointestinal condition. Specific comorbid conditions reported in this AF patient population included hypertension in 72% of patients, history of myocardial infarction in 21% of patients, heartburn/gastroesophageal reflux disease in 29% of patients, and allergies/hay fever in 29% of patients. The mean Charlson Comorbidity Index score was 1.53 for all patients. Almost half of patients (46%) had a CHADS₂ score of ≥ 2 . The percentage of patients reporting current medication use included: 71% for AF, 64% for hypertension, 50% for hyperlipidemia, 29% for arrhythmia, 24% for diabetes, and 26% for gastrointestinal medications. Overall, 43% of patients with AF were using an anticoagulant medication. **CONCLUSIONS:** This self-reported national survey identified AF patients as having a high comorbidity burden, with conditions affecting a variety of organ systems. Medications used to treat a variety of conditions are also highly prevalent and should be taken into account in managing patients with AF.

PCV14

DYSPEPSIA AND DISEASE BURDEN AMONG PATIENTS WITH ATRIAL FIBRILLATION (AF)

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OBJECTIVES: Many agents used in treating AF have potential gastrointestinal (GI) tolerability issues. Treatment-related adverse GI events are a common reason for noncompliance to treatment. The current analysis describes the prevalence of dyspepsia in relation to anticoagulant use among AF patients. **METHODS:** Data were obtained from the 2009 National Health and Wellness Survey (N=75,000), an annual cross-sectional Internet-based survey of US adults. Respondents answered general demographic and health-related questions. A CHADS₂ score (an index of stroke risk) was calculated for each patient using demographic and clinical characteristics. **RESULTS:** A total of 1297 patients (1.7%) reported a diagnosis of AF. Of these patients, 535 (41%) also reported a physician-diagnosed GI condition; 449 of these (84%) were consistent with dyspepsia (ulcers, abdominal bloating, abdominal pain, gastroesophageal reflux disease/acid reflux, or heartburn). Compared with AF patients without dyspepsia (n=848), those with dyspepsia were younger (mean 62.9 vs. 66.0 years, p<0.05) and more likely to be female (43% vs. 31%, p<0.05). AF patients with dyspepsia were in poorer health than those without dyspepsia, as evidenced by a higher CHADS₂ score (1.9 vs. 1.4, p<0.05); this difference was more pronounced in patients aged >65 years and in those with CHADS₂ score >2. Despite this, significantly fewer AF patients with than without dyspepsia were taking a prescription medication to treat AF (67% vs. 73%, p<0.05) or an anticoagulant for stroke prevention (35% vs. 47%, p<0.05). **CONCLUSIONS:** One-third of AF patients in this analysis had dyspepsia. These patients reported a greater disease burden and stroke risk relative to AF patients without dyspepsia. Significantly fewer AF patients with than those without dyspepsia were taking a prescription to treat AF or an anticoagulant for stroke prevention. Poor GI tolerability may be significant in the AF population and should be considered when adherence to medication is critical, such as in high-risk populations.

PCV15

PREDICTORS OF THE COMBINED DIAGNOSIS HYPERLIPIDEMIA AND HYPERTENSION - A NHANES 2007-2008 STUDY

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OBJECTIVES: Cardiovascular disease (CVD) remains the leading cause of death in the United State (US). Both hyperlipidemia and hypertension are known risk factors for CVD. Tobacco use augments this risk by lowering the HDL cholesterol, increasing blood clotting, and acutely elevating blood pressure. The objective of this study was to examine predictors of having both co-morbidities including demographic characteristics and smoking status. **METHODS:** A retrospective cross-sectional study was conducted using the NHANES 2007-2008 database, a stratified multistage probability sample of the civilian non-institutionalized US population. The outcome variable was defined as being diagnosed with both hypertension and