Medicare beneficiaries aged ≥65 years, diagnosed with depression, and no history of falls (Injury in the Older Adult Period) Cancer with incident fractures following the baseline period. For each case, age and sex-matched controls were selected using incidence density sampling. The primary outcome was an inpatient or outpatient claim for fractures, between January 1, 2008 and December 31, 2008. Confidence intervals were calculated using the Anticholinergic Drug Scale (ADS). Prescription of level 2/3 anticholinergic medications 30 days preceding the event date formed the primary exposure. Conditional logistic regression models were used to investigate control sets that were retained as patients with the fracture risk, after controlling for other risk factors of the outcome. RESULTS: The study sample included 43,402 cases of fractures and 173,608 matched controls (Incidence Density 1:4). After adjusting for other risk factors, there was no difference in risk with high-level anticholinergic use compared to non-use (Relative Risk, RR 1.02; 95% Confidence Interval [CI], 1.00-1.04). The findings remained consistent across levels of anticholinergic potency (Level 2, RR 1.01, 95% CI, 0.98-1.06, Level 3, 95% CI, 1.03, 0.99-1.06). CONCLUSIONS: These results add to existing evidence that anticholinergic drugs are associated with a higher risk of fractures compared to no use among elderly residents with depression. Given their safety concerns, there is a need to further evaluate other adverse outcomes associated with anticholinergics in the elderly.

PMH3 THE IMPACT OF ALTERNATIVE ANTIPSYCHOTIC MEDICATIONS ON THE RISK OF ADVERSE EVENTS IN PATIENTS TREATED FOR SCHIZOPHRENIA Tani T, Park S, McCombs J
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OBJECTIVES: This study compares the risks of side effects [SE] associated with a broad range of atypical and typical antipsychotics used to treat patients with schizophrenia. METHODS: Medical and pharmacy claims data from Humana from January 2007 to June 2013 were used to define episodes of antipsychotic drug therapy for patients with schizophrenia. Episodes were screened for a minimum of 180 days of pre‐episode and 360 days of post‐episode data, and for the existence of study SEs prior to the episode index date. Study samples ranged from N=114,768 for risperidone and acute kidney injury (AKI), hypotension, pneumonia (PNA), acute coronary syndrome (ACS) or ischemic stroke/cerebral infarction, and ventricular cardiac arrhythmia (VCA). Logistic regression models were used to estimate the impact of alternative antipsychotics on the risk of an emergent SE in the year following the initiation of treatment. The logistic models controlled for patient demographics, treatment history, concomitant use of antidepressants, mood stabilizers and anticonvulsants, and diagnosis and drug use profiles in the prior 6 months. Haloperidol was used as the comparison drug. RESULTS: Perphenazine and ziprasidone reduced the risk of acute cardiovascular events relative to haloperidol. The risk of acute kidney injury was significantly increased in patients taking aripiprazole, olanzapine, quetiapine, risperidone and ziprasidone. The relative to haloperidol risk in patients elevated in chlorpromazine and quetiapine patients and reduced in those using paliperidone, perphenazine and thiopxone. The risk of AUR was increased in patients using fluphenazine, but reduced in patients using aripiprazole, risperidone and thioxrene. The risk of RM was increased by the use of fluphenazine and quetiapine while the risk of pneumonia was elevated for patients using chlorpromazine, clozapine, paliperidone and quetiapine. CONCLUSIONS: The risk of side effects varies widely across antipsychotic medications.

PMH4 THE IMPACT OF ALTERNATIVE ANTIPSYCHOTIC MEDICATIONS ON THE RISK OF ADVERSE EVENTS IN PATIENTS TREATED FOR BIPOLAR DISORDERS Tani T, Park S, McCombs J
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OBJECTIVES: This study compares the risks of side effects [SE] associated with a broad range of atypical and typical antipsychotics used to treat patients with bipolar disorder. METHODS: Medical and pharmacy claims data from Humana from January 2007 to June 2013 were used to define episodes of antipsychotic drug therapy for patients with bipolar disorder. Episodes were screened for a minimum of 180 days of pre‐episode and 360 days of post‐episode data, and for the existence of study SEs prior to the episode index date. Study samples ranged from N=147,658 for risperidone (RM) to N=150,084 acute urinary retention [AUR]. Other SE for analysis included acute kidney injury (AKI), hypotension, pneumonia (PNA), acute coronary syndrome (ACS) or ischemic stroke/cerebral infarction, ventricular (tachy) arrhythmia (VCA). Logistic regression models were used to estimate the impact of alternative antipsychotics on the risk of an emergent SE in the year following the initiation of treatment. The logistic models controlled for patient demographics, treatment history, concomitant use of antidepressants, mood stabilizers and anticonvulsants, and diagnosis and drug use profiles in the prior 6 months. Haloperidol was used as the comparison drug. RESULTS: Aripiprazole, ziprasidone and risperidone did not differ relative to haloperidol. Only fluphenazine increases the risk of cardiovascular events relative to haloperidol. All other SE impacts related to specific antipsychotics were related to kidney disorders or pneumonia. Chlorpromazine increased the risk of acute kidney injury, hypotension, rhabdomyolysis and pneumonia. Clozapine increased the risk of pneumonia. Olanzapine and quetiapine increased the meta-analysis probability but significantly decreased the risk of AUR. Pazopridone also increased the risk of PNA and decreased the risk of AUR. Quetiapine increased the risk of AKI while perphenazine decreased the risk of hypotension and thioxene decreased the risk of AUR. CONCLUSIONS: The risk of side effects varies widely across antipsychotic medications.

PMH5 A RETROSPECTIVE COHORT STUDY USING CLAIMS DATABASE TO INVESTIGATE THE ACTUAL SITUATION IN TREATMENT OF PANIC DISORDER IN JAPAN Asami Y, Kuriyabashi K, Hosho Y, Yamamoto Y, Nagaya S, Yamazaki T, Fujimoto Y
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OBJECTIVES: The epidemiological evidence of panic disorder (PD) is limited and challenging in the real clinical setting. The aim of this study was to determine the prevalence of PD, and to investigate concurrent diseases and prescriptions in patients with PD using a Japanese healthcare insurance claims database. METHODS: This was a retrospective cohort study in patients having received PD (ICD-10 code F41.1) claims in the MinaCare claims database (MinaCare Co. Ltd, Japan). The annual prevalence was estimated based on claims of fiscal years of 2011 and 2012 (Apr to Mar). The study cohort was a new patient treatment for PD, in 2,100 newly diagnosed PD patients, which was defined as patients with no diagnosis record of PD within 6 months prior to the 1st diagnosis of PD in the database. RESULTS: The estimated annual prevalence of PD was approximately 0.3%. Higher prevalence was observed in females in their mid-20s and mid-30s. In 2,100 newly diagnosed PD patients, the common diseases recorded concurrently at 1st PD diagnosis were insomnia, depression and neurosis. The predominant drugs prescribed at 1st PD diagnosis were alprazolam, sertraline, and paroxetine. CONCLUSIONS: This 1st line treatment, however, the proportion of patients prescribed both SSRIs together with benzodiazepines was less than 40%, and almost half of the patients were not prescribed SSRIs at 1st PD diagnosis. This prescription trend showed no remarkable change during the 6 months post diagnosis period.

PMH6 DEPRESSION TREATMENT PATTERNS AMONG INDIVIDUALS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE Deekhan J, Konduri A
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OBJECTIVES: The prevalence of co-occurring depression in chronic obstructive pulmonary disease (COPD) is high and associated with negative outcomes. Prior studies have shown that combined treatment with psychotherapy and antidepressants is superior to antidepressant treatment alone in reducing depressive symptoms and improving quality of life. However, population‐based treatment patterns are limited. In our study, treatment patterns among individuals with co-occurring COPD and depression are limited. We examined the patterns of depression treatment in various subgroups of individuals with co-occurring COPD and depression. We classified depression treatment into three categories: antidepressants only; psychotherapy only; combined treatment of depression with psychotherapy and antidepressants. We conducted chi-squared tests and multinomial logistic regressions to examine patterns of depression treatment by socio-demographic, medical conditions and health status characteristics of this population. RESULTS: Overall, 18.5% of the study population reported no treatment for depression, 72% reported antidepressants only use and only 9.5% reported the use of psychotherapy in conjunction with antidepressants. Females were significantly more likely than males to receive psychotherapy and antidepressants for depression treatment (AOR=2.41, 95% CI=1.21, 4.81). Uninsured individuals were less likely than individuals with private insurance in receiving treatment (AOR=0.6, 95% CI=0.68, 0.84). Individuals with no perceived mental health status were more likely to receive combined treatment than individuals reporting excellent very good mental health status (AOR=4.19, 95% CI=1.34, 13.05). Those with high AHRQ were significantly more likely to receive combined treatment (AOR=3.21, 95% CI=1.62, 6.37). CONCLUSIONS: Future studies should expand the study to identify the barriers to combined treatment of depression with psychotherapy and antidepressants among various subgroups of individuals with co-occurring COPD and depression.

PMH7 ANTIPSYCHOTICS FOR TREATMENT OF PEDIATRIC SCHIZOPHRENIA: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS OF SYMPTOM CONTROL, WEIGHT GAIN AND DISCONTINUATION DUE TO ADVERSE EVENTS Harvey EL, Shields GE, James AC
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OBJECTIVES: Few studies discuss the effectiveness and side effects of the use of antipsychotics in the pediatric population, despite the poor prognosis associated with the disorder, including high suicide risk. This study explores the efficacy of trialled antipsychotics for early-onset schizophrenia in order to determine which treatments are potentially efficacious in this population. METHODS: A systematic literature review was performed to identify trials conducted in children and adolescents with schizophrenia that reported symptom control (eficacy) using the positive and negative syndrome scale (PANSS), a medical scale frequently used for assessing the schizophrenia symptom severity in trials. A Bayesian random effects meta-analysis was conducted to estimate the network treatment effects, including mean change from baseline in PANSS scores (including positive and negative subscales), weight gain and treatment discontinuation due to adverse events. RESULTS: Eleven studies were identified with a total of 718 patients in the studies. Ten treatments were included in the network meta-analysis. All treatments showed a greater reduction in PANSS scores at 6 weeks vs placebo; however, not all results were statistically significant. Haloperidol had the greatest reduction vs placebo, and treatment ranked for utilities suggests haloperidol had the highest QALYs followed by risperidone as being the best treatment in the network for reducing total PANSS scores. All treatments showed a trend of greater odds of discontinuing treatment due to adverse events vs placebo. However, pairwise comparisons were statistically non-significant. Nine out of thirteen treatments showed a trend of increased weight compared with placebo.