Medicare beneficiaries aged ≥26 years, diagnosed with depression, and no history of falls/fainting in the previous year were evaluated for adverse events 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, 2010. Antipsychotic exposure was defined as use of Antipsychotic Drug Exposure (ADES). Prescription of level 2/3 antipsychotic medications 30 days preceding the event date formed the primary exposure. Conditional logistic regression model with case-control sets were used to estimate the 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). Adjusting for other risk factors, there was no difference in risk with level 1 antipsychotic use compared to non-use. RR 1.02, 95% Confidence Interval [CI], 1.00-1.04. The findings remained consistent across levels of antipsychotic potency (Level 2, RR 1.01, 95% CI, 0.98-1.06; Level 3, 95% CI, 1.03, 0.99-1.07). However, use of benzodiazepines was 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 anticholinergic in the elderly.

PMH3 THE IMPACT OF ALTERNATIVE ANTIPSYCHOTIC MEDICATIONS ON THE RISK OF ADVERSE EVENTS IN PATIENTS TREATED FOR SCHIZOPHRENIA

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OBJECTIVES: This study compares the risks of side effects (SE) associated with a broad range of typical and atypical 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 defined as a minimum of 30 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=97,481 for rhabdomy- olysis and 6,200 for 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 emergency room visit or hospitalization due to acute cardiovascular events relative to haloperidol. The logistic models controlled for patient demographics, treatment history, concomitant use of antidepressants, mood stabilizers and anticonvulsants, 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, relative to haloperidol. The risk of acute kidney injury was significantly increased in patients taking haloperidol, and the adjusted risk was significantly higher in men than in women. CONCLUSIONS: The study is the first to evaluate the impact of alternative antipsychotics on the risk of acute cardiovascular and acute kidney injury in patients with schizophrenia. The results suggest that perphenazine and ziprasidone are safer choices than haloperidol for treating schizophrenia, while aripiprazole, olanzapine, quetiapine, risperidone and ziprasidone should be avoided.

PMH4 THE IMPACT OF ALTERNATIVE ANTIPSYCHOTIC MEDICATIONS ON THE RISK OF ADVERSE EVENTS IN PATIENTS TREATED FOR BIPOLAR DISORDERS

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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 defined as a minimum of 30 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 rhabdomyolysis (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 acute cardiovascular events relative to haloperidol. The risk of acute kidney injury was significantly increased in patients taking aripiprazole, olanzapine, quetiapine, risperidone and ziprasidone, relative to haloperidol. The risk of acute kidney injury was significantly increased in patients taking haloperidol, and the adjusted risk was significantly higher in men than in women. CONCLUSIONS: The study is the first to evaluate the impact of alternative antipsychotics on the risk of acute cardiovascular and acute kidney injury in patients with bipolar disorder. The results suggest that perphenazine and ziprasidone are safer choices than haloperidol for treating bipolar disorder, while aripiprazole, olanzapine, quetiapine, risperidone and ziprasidone should be avoided.

PMH5 ANTIPSYCHOTICS FOR THE TREATMENT OF PEDIATRIC SCHIZOPHRENIA: A SYSTEMATIC REVIEW AND NETWORK META-ANALYSIS OF SYMPTOM CONTROL, WEIGHT GAIN AND DISCONTINUATION DUE TO ADVERSE EVENTS

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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 trials involving 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 (efficacy) 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 model using the network meta-analysis was used to compare the outcomes, 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 included in the network meta-analysis. Risk in favor of placebo was 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 the utilities suggested that haloperidol had the best performance for 6 weeks and 12 weeks, with haloperidol 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 not significant. Nine out of thirteen treatments showed a trend of increased weight compared with placebo.