PMH8

RISK OF FALLS AND FRACTURES IN OLDER ADULTS USING ATYPICAL ANTI-PSYCHOTICS: A MULTIPLE PROPENSITY SCORE ADJUSTED RETROSPECTIVE COHORT STUDY

Chatterjee S, Chen H, Johnson ML, Aparsu RR

Objective: To determine the incidence of falls and fractures in older adults using atypical antipsychotics using data from the Truven Health Analytic files. METHODS: A retrospective cohort study was conducted between July 1, 2000 and June 30, 2008 using IMS LifeLink Health Plans claims data. Patients were followed until hospitalization/emergency room (ER) visit for accidental fall/hip fracture, or the end of the study period, whichever occurred earlier. The risk of falls and fractures associated with use of atypical antipsychotics was compared to the use of typical antipsychotics using the Cox proportional hazards model. RESULTS: The incidence of falls or fractures for risperidone, olanzapine and quetiapine were 165 (3.65%), 109 (2.81%) and 106 (4.47%) respectively. After adjusting for propensity scores and other covariates, the Cox proportional hazard model showed that there was no statistically significant difference with use of atypical antipsychotics (hazard ratio, HR 1.01-9.82). CONCLUSIONS: The results suggest that the use of atypical antipsychotics is not associated with an increased risk of falls or fractures compared to typical antipsychotics.

PMH9

LIKELIHOOD OF POTENTIAL DRUG-DRUG INTERACTIONS AMONG PERSONS INITIATING THERAPY WITH SELECTIVE SEROTONIN REUPTAKE INHIBITORS: EFFECT OF INITIAL SSRI AND OTHER FACTORS

Valuck RJ1, Libby AM1, Anderson HD2, Ederer M2, Miles D1, Doshi JA3, Collins C4, Preskorn S1

1University of Colorado, Denver, Aurora, CO, USA, 2Shire Pharmaceuticals, Wayne, PA, USA, 3Lundbeck SAS, Issy-les-Moulineaux, France, 4University of Pennsylvania, Philadelphia, PA, USA

Objectives: To determine the likelihood of drug-drug interactions among patients initiating therapy with Selective Serotonin Reuptake Inhibitors (SSRIs). Pharmaceutical and drug-drug interactions are concerns for drug safety. Existing studies to date have focused on the pharmacokinetics of the drugs and the potential for drug-drug interactions, but the prevalence of interactions has not been studied. Methods: A retrospective cohort of newly depressed subjects on antidepressant monotherapy was used to identify potential drug-drug interactions. We used the Drug Interaction Database (DID) to identify potential drug-drug interactions and compared the results to the expert panel list of potential drug-drug interactions. Results: Of the 2,518 patients included in the study, 1,484 (58.8%) were initiating therapy with an SSRI. Of these, 48.5-62.0% of subjects had at least one instance of coprescribing of potentially interfering drugs. Side effects and adverse events were also assessed. Conclusions: The likelihood of potential drug-drug interactions is high and may be underestimated. Future studies should be designed to identify the prevalence of drug-drug interactions and their impact on patient outcomes.

PMH8

DIFFERENTIAL RATES OF SIDE EFFECTS IN DEPRESSED ADULTS AND ADOLESCENTS BEING TREATED WITH ANTIDEPRESSANTS

Andersson HD, Libby AM, Pace WD, West DR, Valuck RJ

University of Colorado, Denver, Aurora, CO, USA

Objectives: To examine the prevalence of side effects in depressed adults and adolescents taking different classes of antidepressants. Methods: A new-user design was implemented using 11 years of data to identify a retrospective cohort of newly depressed subjects on antidepressant monotherapy, defined as SSRI, SNRI, TCA, MAOI, bupropion, phenelzine, or tetracyclic antidepressants. Rates of side effects (per 1,000 person-months of exposure) were calculated within each antidepressant group; relative risks were calculated (SSRI as referent group). Propensity-adjusted Cox Proportional Hazards regression was used to model the likelihood of side effects adjusted for demographic, clinical and treatment characteristics. Results: A total of 40,017 patients had a new episode of depression and were on antidepressant monotherapy within 30 days of diagnosis (SSRI [66%], Bupropion [14%], SNRI [12%], other [8%]). The most common side effects were headache (up to 16.8 per 1,000 person-months of therapy in adults, 17.6 per 1,000 in adolescents) and nausea (up to 7.2 per 1,000 in adults, 9.3 per 1,000 in adolescents). Relative to atypical antipsychotics, SSRIs had a significantly higher risk of nausea (HR = 1.28, 95%CI = 1.08-1.52), and of having one or more side effect of any type (HR = 1.23, 95%CI = 1.10-1.37). Adults taking bupropion were less likely to have sedation (HR = 0.36, 95%CI = 0.16-0.79). Adolescent receiving an SSRI were more likely to experience sedation compared to adolescents receiving an SSRI (HR = 3.14, 95%CI = 1.01-9.82). Conclusions: Side effects detected in clinical trials must be significant enough to be reported to the provider and medically coded, so these rates are underestimated. Nevertheless, the reported rates are nontrivial. Future work will account for side effects in the likelihood of discontinuation and associated reduced comparative effectiveness.

PMH8

RISK OF DEATH IN DUAL ELIGIBLE NURSING HOME RESIDENTS USING ANTIPSYCHOTIC AGENTS

Aparasu RR, Mehta S, Chen H

University of Houston, Houston, TX, USA

Objectives: Antipsychotic use among dual eligible nursing home residents is a cost and safety concern. This study examined the comparative risk of death in dual eligible elderly nursing home residents using typical and atypical agents. Methods: A retrospective cohort design was matched on propensity score was used to examine the risk of death due to antipsychotic use among dual eligible nursing home residents.