therapy, and various mental disorders were combined with these results to create a model that is almost 80 percent accurate. Mortality can be predicted using the variables vascular catheterization, respiratory intubation, and coronary atherosclerosis with an accuracy of 63.4 percent. CONCLUSION: A bimodal trend in the age of drug abusers suggests two different types of drug abuse. The most likely explanation is the abuse of recreational drugs around the age of 40 and the abuse or misuse of prescription drugs around the age of 80. Mortality can be predicted so accurately using only three variables because these procedures are associated with the highest probability of death.

ATYPICAL ANTIPSYCHOTIC MEDICATIONS IN THE TREATMENT OF SCHIZOPHRENIA: A BAYESIAN META-ANALYSIS OF DIRECT AND INDIRECT COMPARISONS

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OBJECTIVE: The purpose of this study was to evaluate the relative efficacy of different atypical antipsychotic medications (AAPs) in the treatment of schizophrenia using a Bayesian mixed treatment comparison (MTC) model. METHODS: The Cochran central register of controlled trials and PubMed database were searched to identify randomized controlled clinical trials assessing the efficacy of AAPs (olanzapine, risperidone, clozapine, aripiprazole, quetiapine, ziprasidone) in the treatment of schizophrenia. Studies were included if they used change in the Positive and Negative Syndrome Scale (PANSS) as an outcome measure. Findings from these studies were analyzed using Bayesian meta-analysis of direct and indirect comparisons. Both, fixed and random effects models were employed in the analysis. RESULTS: Twenty eight trials were identified, which included a total of 6023 patients. The fixed effects model indicated that clozapine and olanzapine had significantly greater improvements on the PANSS overall scale (median change from baseline: 19.4 (95% credible interval [CrI] 19.2–19.5) and 19.3 (95% [CrI] 19.3–19.4) for clozapine and olanzapine respectively) than all other AAPs. In the rank order analysis, clozapine had a 82% probability of being the best treatment. Clozapine showed significantly more improvements on the positive subscale (mean change from baseline 5.4 (95% [CrI] 5.2–5.5), and 100% probability of being the best treatment). On the negative subscale, clozapine and olanzapine showed significantly more improvements than other APPs. However, the random effects model found no significant differences among the AAPs in the magnitude of improvements on the PANSS overall scale, as well as the positive and negative subscales. This may be due to substantial inter-study variation. CONCLUSION: Using a fixed effects model, clozapine and olanzapine were found to be significantly more efficacious, but these findings were not supported by the random effects analysis. More direct comparisons are needed to make definitive conclusions about the relative efficacy of these agents.

REHOSPITALIZATION AFTER DISCONTINUATION OF PALIPERIDONE ER IN PATIENTS WITH SCHIZOPHRENIA

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OBJECTIVE: One way to evaluate effectiveness of antipsychotics is to measure frequency of symptomatic relapses in patients with schizophrenia. The occurrence and duration of hospitalizations are important markers of potential relapses. This study assessed differences in days hospitalized among schizophrenic patients receiving paliperidone extended-release tablets (paliperidone ER) during the 52-week open-label extension (OLE) phases of three double-blind (DB) trials as compared to treatment as usual (TAU) in the six months following the OLE phases of these trials. METHODS: Data on resource use was collected through retrospective chart review. Average number of hospital days during OLE and TAU phases was calculated including the use of bootstrap resampling methods to assess statistical significance of differences. Total person years were calculated for OLE and TAU phases to account for different lengths of observation. Antipsychotic use during TAU phase was also evaluated. Paliperidone ER was not commercially available during TAU phase. RESULTS: In this analysis, patients (n = 71) were from the US (31.0%), Canada (21.1%) and Malaysia (47.9%). Mean (±SD) patient age was 37.9 (±10.5) years; and the majority were male (70.4%). During the OLE, the mean paliperidone ER treatment duration (±SD) was 212.9 (±141.2) days, and the mean dose was 11.4 (±2.1) mg. Patients experienced an average of 5.0 and 15.3 hospital days per person year in OLE and TAU phases, respectively, indicating that a mean increase of 10.3 days of hospitalization was observed during TAU phase (95%CI 2.3,19.2, P = 0.006). During TAU phase, the treatments received were second-generation antipsychotics (SGAs) (52.1%), first-generation antipsychotics (FGAs) (9.9%), or both FGAs and SGAs (14.1%). CONCLUSION: Patients discontinuing paliperidone ER after the OLE phases experienced more hospital days compared to the OLE phases where they received paliperidone ER. Whether this increase in hospital days is associated with a greater frequency or severity of relapses remains to be tested.
tions, reflecting differences in early time points and in illness severity levels. For schizophrenia patients with at least moderate symptom severity, the lack of at least 14–23% improvement on the PANSS total score at two weeks is an optimal predictor of subsequent non-response following eight weeks of treatment. This early response threshold appears to be an important clinical marker of subsequent non-response to antipsychotic therapy.

CLINICAL AND FUNCTIONAL IMPROVEMENTS IN PATIENTS WITH SCHIZOPHRENIA TREATED WITH RISPERIDONE LONG ACTING INJECTION: INTERIM RESULTS FROM OBSERVATIONAL STUDIES CONDUCTED IN AUSTRALIA, BELGIUM AND THE UNITED STATES

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1Royal Brisbane and Women’s Hospital, Herston, Queensland, Australia, 2Universitair Psychiatri Schizophrenia Outcomes Utilization, Relapse, and Clinical Evaluation (SOURCE) in the United States. METHODS: e-Star and SOURCE are long-term, prospective, observational studies of patients with schizophrenia who commence RLAI treatment. Data are collected both retrospectively and prospectively and clinical effectiveness was measured by the Global Clinical Impression Scale (CGI-S) and patient functioning was measured by the Global Assessment of Functioning (GAF) scale. RESULTS: Seven hundred sixty-nine patients (Australia = 493, Belgium = 163, USA = 113) with 12-months of follow-up data were included. Australia had significantly younger patients than Belgium and the United States (mean ages: Australia = 38.6, Belgium = 41.6, USA = 43.5; p < 0.0003). Time since diagnosis (in years) was significantly higher in the United States than Australia and Belgium (USA = 17.6, Australia = 11.6, Belgium = 9.8; p < 0.0001). United States patients had significantly higher baseline GAF scores than the Australian and Belgian patients (USA = 50.9, Australia = 42.7, Belgium = 43.1; p < 0.0001). Despite baseline differences, GAF and CGI-S scores at 12-months for patients treated with RLAI significantly improved from baseline in all three countries. CGI-S scores significantly decreased by 0.8 (p < 0.001), 1.08 (p < 0.001) and 0.83 (p < 0.001) points and GAF scores significantly increased by 12.7 (p < 0.001), 14.8 (p < 0.001), and 11.1 (p < 0.001) points in Australia, Belgium, and the United States respectively. CONCLUSION: This interim analysis from the two observational studies shows that despite differences in patient characteristics among countries, treatment with RLAI resulted in significant improvements in disease severity and patient functioning in patients with schizophrenia from all three countries.

TREATMENT DURATION FOLLOWING INITIATION ON ATYPICAL ANTI PSYCHOTICS AMONG SCHIZOPHRENIA PATIENTS WITH VERSUS WITHOUT A METABOLIC SYNDROME

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OBJECTIVE: To assess differences in treatment duration and resource utilization following initiation on atypical antipsychotics among schizophrenia patients with versus without metabolic syndrome who were treated at the Veteran Health Administration. METHODS: We used electronic medical records data for October 2002–August 2005 from a large Veterans Integrated Service Network (VISN16) to identify schizophrenia patients who were initiated on an atypical antipsychotic and have undergone metabolic monitoring in the 180 days prior to medication initiation. Those found to have a metabolic syndrome (MetSyn+) were compared to those without (MetSyn−) on patient characteristics, treatment duration, medication adherence per medication possession ratio (MPR), and resource utilization in the 1-year post medication initiation. Kaplan-Meier (K-M) estimation compared the difference in treatment duration. A Cox proportional hazard regression was used to compare all-cause medication discontinuation, controlling for group differences at baseline. RESULTS: A minority of schizophrenia patients who have undergone metabolic monitoring was found to have a metabolic syndrome (83 of 593, or 14.0%). The MetSyn+ and MetSyn− groups did not significantly differ on baseline characteristics except that the MetSyn+ group had a higher rate of non-VA adherence. MPR during the year following medication initiation was higher for the MetSyn+ group (81% vs. 68%; p = 0.031). K-M estimators (log-rank test p = 0.471; Wilcoxon test p = 0.512) and a Cox model (p = 0.671) indicated lack of statistically significant group difference in all-cause medication discontinuation. CONCLUSION: Among schizophrenia patients who have undergone metabolic monitoring, those with a metabolic syndrome and those without do not appear to differ on treatment duration and resource utilization following initiation on an atypical antipsychotic medication in the Veterans Health Administration.

RETENTION RATES FOR ORAL AND DEPOT ANTI PSYCHOTIC MEDICATIONS OVER ONE YEAR IN ONTARIO, CANADA

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OBJECTIVE: Continuous treatment is an important goal in the management of schizophrenia. Retention rate is a well-recognized global measure of effectiveness that integrates patients’ and clinicians’ judgment of efficacy, safety and tolerability. Furthermore, all-cause discontinuation was used as a primary outcome measure in a large effectiveness study (Clinical Antipsychotic trial of Intervention Effectiveness or CATIE). The current study utilized longitudinal claims data from Ontario Drug Benefit (ODB) recipients in Ontario, Canada to compare retention rates for typical and atypical antipsychotic medications with different formulations. METHODS: Longitudinal data were obtained for ODB recipients that were initiated on antipsychotic therapy in July 2006. ODB recipients were followed from their first claim for the specific target drug to their last claim in a 12-month period. Rates of retention were determined throughout and up until 12 months. Descriptive analyses were performed. Retention rates were reported for depot (long-acting injectable) risperidone; oral atypical antipsychotics including olanzapine, risperidone, and quetiapine; orally disintegrating tablet formulations of risperidone and olanzapine; oral typical antipsychotics (pooled); and depot typical antipsychotics (pooled). RESULTS: From July 2006–June 2007, 12-month retention rates were lowest with oral typical (29% of recipients), depot typical antipsychotics (30%), and risperidone orally disintegrating formulations (30%). Retention rates for oral atypical antipsychotics were 41% for olanzapine, 46% for risperidone and 50% for quetiapine. Retention on risperidone long-acting injectable were the highest with 73% of recipients retained over 12-months. CONCLUSION: Retention rates were lowest