PMH31

PATTERNS OF TREATMENT AMONG BIPOLAR DISORDER PATIENTS TREATED WITH ANTIDEPRESSANTS

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OBJECTIVE: This study compared treatment patterns for bipolar disorder (BP) patients (recognized and unrecognized) to those of major depression disorder (MDD) patients without a BP claim (non-BP) during the observational period. METHODS: An employer administrative claims database (covering several managed care health plans from 1998–2001) was used to identify 11,464 patients diagnosed with MDD and initially treated with antidepressants (AD). Of these, unrecognized BP (UBP) patients received their initial BP diagnosis and/or mood stabilizer (MS) prescription after AD initiation, while recognized BP (RBP) patients had these records on/before AD initiation. Induced BP patients were defined as those manifesting mania within six months after starting AD. RESULTS: BP patients accounted for 6.8% of the research sample (3.7% UBP and 3.1% RBP). Induced BP represented 6.6% of all BP patients. RBP patients had a slightly lower rate of induction (6.2%) than UBP patients (6.9%). The use of combination therapies varied in the non-BP, UBP, and RBP patients (11%, 32%, and 43%, respectively) (all pairwise p < 0.01). The use of MS was less frequent among UBP than RBP patients (14% and 34%, respectively) (p < 0.0001). CONCLUSIONS: A substantial number of AD-treated MDD patients could be classified as bipolar (either RBP or UBP), and were at risk for induction of mania. RBP and UBP patients initiated with more combination therapies, as compared to Non-BP patients. MS use increased when BP was recognized. More effort is needed to quickly diagnose and effectively treat BP patients.

PMH32

AN ECONOMIC COMPARISON OF ANTIPSYCHOTICS IN TREATMENT OF SCHIZOPHRENIA

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OBJECTIVES: A Markov model was developed to determine costs and outcomes of one year of antipsychotic treatment for patients with schizophrenia. METHODS: The model simulated a 4-armed, randomized, parallel, 12-month observational study of 2000 inpatients and 2000 outpatients initiating treatment on ziprasidone (Z), risperidone (R), olanzapine (O), or haloperidol (H). Equivalent efficacy between treatments was assumed; however, relapse rates on haloperidol were adjusted to be consistent with Csernansky et al. 2002. Weighted averages were used for published treatment-emergent adverse event rates for akathisia (Z = 7.9, R = 15.1, O = 7.8, H = 20.8), other extrapyrdidal symptoms (Z = 11.5, R = 9.0, O = 11.6, H = 26.7), weight gain (Z = 10.0, R = 14.8, O = 28.2, H = 11.0), and prolactin-related side effects (Z = 2.2, R = 11.2, O = 5.2, H = 3.0) to estimate tolerability, comitant medication use, treatment changes, non-compliance, and relapse. Costs for inpatient care, sub-acute chronic care, and outpatient visits were based on published private and public medical claims databases. Medication costs were $170.63/month (Z = 120 mg/d), $242.61/month (R = 4.8 mg/d), $344.17 (O = 13.2 mg/d), and $6.72 (H = 15 mg/d) (RedBook 2002). Outcome measures included days in acute care, total direct medical costs, and incremental costs. RESULTS: Because of greater tolerability, estimated days in acute care were lowest for ziprasidone (42.4) when compared to olanzapine (42.8), risperidone (43.1), or haloperidol (53.6). Due to lower estimated days in acute care and lower maintenance treatment drug costs, estimated annual total healthcare costs for each drug cohort (n = 1000 patients per cohort) were lowest for those patients initiating treatment with ziprasidone vs. risperidone (+$787,000), olanzapine (+$964,000), or haloperidol (+$4,210,000). Sensitivity analyses to changes in model assumptions for adverse event, adherence, and relapse rates, and healthcare costs were robust to these conclusions. CONCLUSION: Ziprasidone has an adverse event profile distinct from those of other atypical antipsychotics and lower pharmaceutical acquisition costs, which potentially lead to improved outcomes and lower total direct costs.

PMH33

OLANZAPINE VERSUS RISPERIDONE IN THE TREATMENT OF SCHIZOPHRENIA: A MENTAL HEALTH COST COMPARISON IN A MANAGED CARE SETTING

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OBJECTIVE: To determine whether or not subtle differences between risperidone and olanzapine, two similarly-efficacious medications, are reflected in health care utilization patterns, and therefore, costs, in patients with schizophrenia receiving usual care. METHODS: A retrospective cohort study was conducted from the payer perspective in two group model managed care organizations. Analysis of covariance and logistic regression were used to identify outpatient cost and hospitalization differences respectively, while adjusting for variables that may independently influence mental health utilization and choice of atypical agent. Patients ages 18–64 initiating risperidone or olanzapine between January 1997 and December 2000 diagnosed with schizophrenia or schizoaffective disorder in the pre-initiation year were included if they received no atypical antipsychotics in the previous year and were continuously enrolled one year pre through one year post initiation. Utilization units were transformed into 2001 costs at one site. The total post-initiation year outpatient mental health cost derived included all mental health outpatient visits (including urgent care) and medications, and tests related to olanzapine or risperidone monitoring. The relationship between drug exposure and hospitalization was explored using logistic regression. An intent-to-treat analysis was performed. RESULTS: Patients receiving risperidone were less costly in the post-initiation year than patients receiving olanzapine. The results were significant (p < 0.05) controlling for age, gender, coverage type, total mental health outpatient costs in the year prior to initiation, study site, index year, mental health comorbidities, and mental health hospitalization in the pre-initiation year. Seventeen percent of olanzapine and 21% of risperidone patients were hospitalized in the year post initiation, a difference that was not statistically significant. CONCLUSIONS: Prescribers should consider using risperidone before using olanzapine when initiating therapy in a patient with schizophrenia who has no contraindications to either medication. More study is needed to determine the relationship between atypical choice and mental health hospitalization.

**PMH34**

**COMPARISON OF OLANZAPINE VERSUS QUETIAPINE IN THE TREATMENT OF HOSPITALIZED PATIENTS WITH SCHIZOPHRENIA**

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OBJECTIVE: To compare pharmacotherapy patterns and treatment outcomes for olanzapine- versus quetiapine-treated hospitalized patients with schizophrenia. METHODS: Hospitalized olanzapine- and quetiapine-treated patients discharged with schizophrenia (ICD9: 295.xx) between 01/1999 and 09/2001 were identified using Premier’s PerspectiveTM database, the largest U.S. hospital drug utilization database. Outcome measures include use of other antipsychotics, mood stabilizers, antidepressants, anxiolytics, and hypnotics; length of stay (LOS); and total treatment costs were analyzed by regressions, controlling diagnoses, illness severity, patient and institution characteristics. RESULTS: Of 9433 patients (54.8% male, mean age 41.5 years), 6699 were olanzapine-treated and 2734 quetiapine-treated. After adjusting for confounding factors, olanzapine-treated patients used fewer psychotropic agents (–0.36, p < 0.0001) and were less likely to switch to or augment with other atypical antipsychotics (odds ratio (OR) = 0.71, 95% confidence interval (CI) = 0.62 – 0.81). Olanzapine-treated patients were less likely to be treated with typical antipsychotics (OR = 0.77, CI = 0.70 – 0.85), mood-stabilizers (OR = 0.84, CI = 0.77 – 0.93), anxiolytics (OR = 0.67, CI = 0.60 – 0.74), or anti-Parkinsonian agents (OR = 0.87, CI = 0.79 – 0.96). There was no between-group difference in antidepressant or hypnotic use. Total costs for olanzapine-treated patients were lower (~$678, p < 0.0001) as the result of shorter LOS (~11.4%, p < 0.0001). CONCLUSIONS: Compared to quetiapine, olanzapine treatment for hospitalized patients with schizophrenia was associated with more favorable pharmacotherapy patterns, shorter LOS, and lower costs.

**PMH35**

**ATYPICAL ANTIPSYCHOTICS: TREATMENT PATTERNS, UTILIZATION AND COST AMONG MANAGED CARE ENROLLEES**

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OBJECTIVES: To examine treatment patterns and analyze differences in health services utilization and costs for subjects receiving risperidone, olanzapine or quetiapine. METHODS: This study used administrative claims data to identify continuously enrolled subjects prescribed atypical antipsychotics between January 1, 2000 and December 31, 2000. Subjects were assigned to a diagnostic category based on the appearance of two or more ICD-9 codes for schizophrenia, affective disorder, dementia, anxiety or childhood disorders during the study period. Duration of therapy, compliance, daily dose, daily average consumption and concomitant medication use were analyzed descriptively. Subjects were propensity score matched on baseline characteristics for the purpose of comparing health services utilization and cost by site of service. RESULTS: Of 6471 study subjects, average annual days of therapy were nearly equal between drug groups (184–186 days). However, average annual days of therapy varied widely by diagnostic condition (181 days for anxiety, 270 days for schizophrenia). Concomitant use of psychotropic medication was common for all 3 drugs (81%). Subjects receiving risperidone had an average daily dose below the recommended target dose for schizophrenia as did olanzapine subjects with bipolar disorder. Daily average consumption increased slightly for risperidone and quetiapine subjects.