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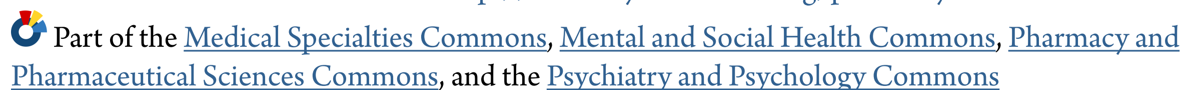
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EVALUATION OF CONCURRENT MEDICATIONS PRE- AND POST INITIATION OF LONG-ACTING INJECTABLE ANTIPSYCHOTIC THERAPY

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PURPOSE

Retrospectively evaluate concurrent psychotropic medications in schizophrenic patients prior to- and during long-acting injectable (LAI) antipsychotic therapy

BACKGROUND

- **Approximately one percent (1%) of the adult population (2.4 million) has schizophrenia[1]**
- **Schizophrenic patients oftentimes have multiple comorbid mental and substance-abuse issues, and other health-related comorbidities[2]**
- **Medication compliance is of immense importance in these patients[2,3,4]**
  - Non-adherence or partial medication compliance occurs in >50% of schizophrenic patients[5]
- **Primary goals of therapy: minimize or eliminate the symptoms of schizophrenia, maximize the patients' quality of life and social functioning, maintain a level of mental stability[6]**
- **Meta-analysis reviewed 613 outpatient 'mirror-image' studies[7]**
  - Assessed evidence of efficacy for oral versus LAI antipsychotic medications[7]
  - Hospitalization days for patients taking LAI antipsychotic medications versus oral preparations: 17,860 versus 75,492 days[7]
  - Relapse rates for patients using LAI antipsychotics compared to oral preparations: 30% versus 47.1% patients, statistically significant[7]
- **Olfson et al. found that patients receiving LAI preparations compared with oral antipsychotics continued to require multiple concurrent oral psychotropics[8]**
  - Antidepressants, anxiolytics/hypnotics, mood stabilizers, and oral antipsychotics[8]
- **Shi et al. evaluated characteristics of patients taking LAI antipsychotics versus oral antipsychotics[9]**
  - Two-thirds of LAI antipsychotic group concurrently received more psychotropic medications compared to those on oral antipsychotics only[9]
  - LAI antipsychotic group tended to be more difficult-to-treat, non-compliant and refractory to traditional oral antipsychotics[9]
- **If LAI antipsychotics can decrease the number of concurrent psychotropic medications, this may increase patient compliance**
- **No trials directly assess the number of concurrent psychotropic medications prior to- and during LAI antipsychotic therapy**

STUDY DESIGN

- **Retrospective chart review**
- **Inclusion criteria:**
  - Patients prescribed LAI antipsychotic (fluphenazine decanoate, haloperidol decanoate, paliperidone palmitate, and long-acting risperidone) for a minimum period of 180 days for schizophrenia
  - Patients who received LAI antipsychotic between January 2004 and July 2010
- **The primary outcome of the study will be the number of concurrent psychotropic medications prior to LAI antipsychotic therapy, and during LAI antipsychotic treatment**
- **The secondary outcome will be patient relapse rates prior to LAI antipsychotic therapy, and during LAI antipsychotic treatment**

METHODS

- **Chart review evaluating number of concurrent psychotropic medications and relapse rates prior to- and during LAI antipsychotic treatment**
  - Number of concurrent psychotropic medications will be tallied for 180 days prior to- and 180 days during LAI antipsychotic treatment
  - Relapse rate will be examined, as indicated by number of emergency room visits, hospitalizations and admissions for a schizophrenic episode
  - Psychotropic medications: any medication used to treat symptoms of a mental disorder, including schizophrenia, depression, bipolar disorder, anxiety disorders, and attention deficit-hyperactivity disorder (ADHD)
- **Other patient data to be collected includes:**
  - Age, gender, weight, renal function
  - Patient comorbidities, age and date of schizophrenia diagnosis, previously documented failed medications
  - Dates and durations of admissions for schizophrenia exacerbations
  - Patient Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) information for diagnosis, Positive and Negative Syndrome Scale (PANSS) symptoms
  - Factors that may have contributed to acute episodes or mental/mood status changes (including acute illness, trauma, illicit drug use)
- **Following data collection, the number of concurrent psychotropic medications and relapse rates will be compared**

DISCLOSURE

Authors of the presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

- Lindsay Pokallus – nothing to disclose
- Laurence Karper – nothing to disclose
- Jessica Price – nothing to disclose

REFERENCES

1) National Institute of Mental Health [database on the Internet]. Bethesda (MD): NIMH 2010. Available from: http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america/index.shtml#Schizophrenia. Updated July 23, 2010.
2) Wilson N, Cadet JL. Comorbid mood, psychosis, and marijuana abuse disorders: a theoretical review. J Addict Dis. 2009 Oct;28(4):309-19.
3) Wu EQ, Birnbaum HG, Shi L, Ball DE, Kessler RC, Moulis M, Aggarwal J. The economic burden of schizophrenia in the United States in 2002. J Clin Psychiatry. 2005 Sep;66(9):1122-9.
4) Schooler NR. Relapse prevention and recovery in the treatment of schizophrenia. J Clin Psychiatry. 2006;67 Suppl 5:19-23
5) Byerly MJ, Nakonezny PA, Lescouflair E. Antipsychotic medication adherence in schizophrenia. Psychiatr Clin North Am. 2007;30(3):437-52.
6) American Psychiatric Association. Practice guideline for the treatment of patients with schizophrenia. 2nd Ed. Arlington (VA): American Psychiatric Association. 2004 Feb.
7) Davis JM, Matalon L, Watanabe MD, Blake L. Depot antipsychotic drugs: place in therapy. Drugs. 1994 May;47(5):741-73.
8) Olfson M, Marcus SC, Ascher-Svanum H. Treatment of schizophrenia with long-acting fluphenazine, haloperidol, or risperidone. Schizophr Bull. 2007;33(6):1379-87.
9) Shi L, Ascher-Svanum H, Zhu B, Faries D, Montgomery W, Marder SR. Characteristics and use patterns of patients taking first-generation depot antipsychotics or oral antipsychotics for schizophrenia. Psychiatr Serv. 2007 Apr;58(4):482-88.

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