Prevalence of anticholinergic medication use among elderly nursing home residents with depression. The study found that, over 6 in 10 elderly nursing home residents with depression used medications with significant anticholinergic properties. In light of significant central and peripheral adverse effects, there is a need to optimize the use of anticholinergic medications among the elderly residents with depression.

PMH17 ADVERSE REACTIONS DURING PREGNANCY AND RISK OF AUTISM SPECTRUM DISORDERS IN CHILDREN: A POPULATION-BASED COHORT STUDY

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OBJECTIVES: To our knowledge, four studies have attempted to investigate the association between gestational maternal use of antidepressant and risk of Autism Spectrum Disorder (ASD). However, several methodological drawbacks remain in these studies. We sought to assess the impact of gestational antidepressant use on the risk of ASD in children, controlling adequately for potential confounding factors.

METHODS: A large population-based cohort study including all singletons at term live births during 1998-2009 was conducted using data from the Quebec Pregnancy Cohort. Antidepressant exposure during pregnancy was defined according to trimester of use and specific classes. Events were infants having diagnosis of ASD by 4 years of age (before December 31, 2009). We used a cohort definition for crude and adjusted hazards ratio (HRa) with 95% confidence intervals by means Cox proportional hazards regression.

RESULTS: Of 45,456 children born from 1998 through 2009, 1,016 (2.23%) were diagnosed with ASD at 4 years of age (before December 31, 2009). The unadjusted end of follow up was 6.24 ± 3.19 (median, 7.00). We identified 4,724 (2.24%) children exposed to antidepressant during overall pregnancy and 9,207 (6.32%) children exposed one year prior pregnancy. Among 4,724 children exposed to antidepressant during pregnancy of ASD 0.79 (CI: 0.72-0.85) and 0.95 (CI: 0.89-1.01) in the second and third trimester, respectively. When compared the risk of ASD for different classes of antidepressant use during 2nd/3rd trimester with unexposed to any antidepressant, the fully adjusted HR was 2.03, 95% CI (1.13-3.65) among children exposed to SSRIs and 1.40, 95% CI (1.12-1.79) among children exposed to combined classes of antidepressant. CONCLUSIONS: This study suggests that use of antidepressant during the 2nd/3rd trimester of pregnancy may increase the risk of ASD.

PMH18 INCIDENCE OF ANTIPSYCHOTIC POLYPHARMACY IN THE TEXAS MEDICAID POPULATION

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OBJECTIVES: To estimate the incidence of antipsychotic polypharmacy (APP) in the Texas Medicaid population.

METHODS: Adults newly initiated on antipsychotics from July 1, 2006 and December 31, 2010 were followed for 365 days after the index antipsychotic claim. APP was defined as the concomitant use of two or more antipsychotics for at least 4 weeks while adjusting for age and gender. Sensitivity analyses were conducted to determine how variations in the definition of APP affected the results.

RESULTS: Of the 23,235 patients meeting eligibility criteria, 5.4% (N=1,253) were on APP and 94.6% (N=21,979) on MT during the study period. Among those on APP, 70.1% used a combination of atypicals, 1.1% used a combination of typicals, 27.7% used a combination of a typical and an atypical, 0.8% used clozapine and an atypical, and 0.3% used clozapine and a typical. Among those on MT, 7% used typicals, 99.2% used atypicals, and 0.2% used clozapine. Patients with APP had a mean of 106.6±42 (median=24, interquartile range [IQR]=16) days prior to starting polypharmacy. Compared to monotherapy, a median of 277.7 (median=118, IQR=108) days prior to polypharmacy. Sensitivity analyses were conducted to determine how variations in the definition of APP affected the results. Conclusions: Although no clinical guidelines support APP, the current study will be useful to conduct policies to evaluate the costs and harms associated with this practice.