

Methods: We performed a descriptive study in EFEMERIS, a French database of pregnant women who delivered in Haute-Garonne and their outcomes (live birth or pregnancy loss). Between 2004 and 2013, 90,013 mother-child (fetus) pairs were included.

Results: During the 9-year study period, 425 of fetus registered in EFEMERIS (0.5%) were exposed to thiocolchicoside during pregnancy: 302 during the first (71.1%), 95 during the second (22.4%) and 37 during the third (8.7%) trimester.

The outcome was a pregnancy loss (legal or therapeutic termination, miscarriage, stillbirth, and ectopic pregnancy) for 68 exposed women (16.0%). Eight cases of birth defects (1.9%), without any co-prescription for a mutagenic or teratogenic drug, were identified with 4 chromosomal abnormalities (0.9%): 3 trisomies 21 and 1 trisomy 18. In general population on the same geographical area (EFEMERIS data), the prevalence of these outcomes was the following: pregnancy losses 5.9% ($p < 0.0001$), birth defects 2.1% ($p = 0.8$) and chromosomal abnormalities 0.2% ($p = 0.02$).

Conclusions: Women exposed to thiocolchicoside during pregnancy had a higher prevalence of pregnancy losses and chromosomal abnormalities than general population. These first epidemiological data on exposure to thiocolchicoside during pregnancy strengthens the recommendation that physicians must avoid prescribing this drug to women of childbearing age without effective contraception.

557. Venlafaxine Exposure in Pregnancy, A Multicenter ENTIS Study

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Background: Venlafaxine is a serotonin and nor-adrenaline reuptake inhibitor used for the treatment of depression and anxiety disorders. The experience with venlafaxine use in pregnancy is still limited compared to the selective serotonin reuptake inhibitors.

Objectives: The primary aim of this study is to assess the rate of major congenital malformation (MCMs). Secondary aims are pregnancy outcomes: spontaneous abortion, preterm delivery and birthweight.

Methods: This multicenter, prospective cohort study was performed using data from nine centers of the European Network of Teratology Information Services (ENTIS). Information about the exposure, pregnancy data and pregnancy outcome were collected after individual risk counseling. Standardized procedures for data collection and follow up were used by each center. Venlafaxine exposure is compared with a group of women not exposed to any known teratogen during pregnancy. Analysis was performed using logistic regression.

Results: Follow up data were collected on 732 pregnancies of women who used venlafaxine during gestation. In 655 (89.5%) cases the exposure was at least in the first trimester. In total there were 590 live births (5 twins), 85 spontaneous abortions, 57 elective terminations of pregnancy (ETOPs) and 5 stillbirths. In the comparison group were 656 live births (6 twins), 46 spontaneous abortions, 25 ETOPs and 3 stillbirths.

The overall rate of MCMs after first trimester exposure and excluding chromosomal and genetic disorders was 3.25% (17/523) in all live births/stillbirths and ETOPs with known MCM compared to 2.44% (16/656) in the comparison group, OR 1.34 (95% CI 0.67-2.69). The number of preterm deliveries was higher in the venlafaxine group, 62 compared to 36 in the comparison group. No statistical difference was found in the mean birthweight of live born singletons, 3240mg (venlafaxine group) and 3297mg (comparison group).

Conclusions: In this study venlafaxine was not associated with an increased rate of MCMs. The rate of

spontaneous abortion and preterm delivery was higher in the venlafaxine group. Further analysis of the data is necessary to investigate the role of potential confounding factors.

558. Rates of Psychotropic Prescribing in Pregnancy

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Background: Perinatal mental illnesses are common, affecting 1 in 5 women at some point during pregnancy or up to one year after. However, there is uncertainty around using any type of pharmacological interventions during pregnancy and breastfeeding due to the possible risks to the fetus and nursed infant.

Objectives: To assess trends in annual levels of prescribing of psychotropic medication in pregnancy stratified by drug group and by type of mental illness.

Methods: The source population comprised of all acceptable female patients in the CPRD who were registered at an English practice contributing between 01/04/2007 and 31/03/2015. Pregnancies where a potential start and end date could be identified were evaluated. End of pregnancy was identified using Read codes suggestive of pregnancy outcomes (labor, stillbirth, delivery, miscarriage). If end of pregnancy dates were less than 90 days apart they were presumed to be part of the same pregnancy. Start of pregnancy was identified as the event furthest from the end of pregnancy date and within 280 days. Patients who had more than one pregnancy were included multiple times.

Psychotropic prescriptions which were up to three months prior to or during pregnancy were identified. Only one record per psychotropic category per pregnancy was counted. Where enough data was available pregnancies with a psychotropic prescription were stratified by mental health categories. Patients were followed until the earliest of 365 days post pregnancy or the end of their follow up for evidence of prescribing.

Annual rates of psychotropic prescribing were calculated per 100,000 pregnancies. 95% confidence intervals for rates were calculated using a binomial distribution. Pregnancies were counted in the year in which they ended.

Results: The prescribing of antidepressants in pregnancy has significantly increased over time (2007-14)

with most recent estimates of the rates of SSRI's showing 5573.05 (95%CI 5234.71-5925.79) per 100 000 pregnancies.

Conclusions: Rates of antidepressant prescribing in pregnancy have increased despite NICE recommendations that psychological therapies should be first line treatment for most women presenting with mild or moderate illnesses.

559. Psychopharmacological Drug Utilization Patterns in Pregnant Women with Bipolar Disorder – A Nationwide Register-Based Study

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Background: Bipolar disorder is often associated with a lifetime indication for treatment with psychotropic drugs, thus pregnant women and women planning pregnancy face the dilemma whether to continue treatment or not. The therapeutic strategy is often determined by an individual risk-benefit analysis, balancing the potential teratogenic effects of the psychotropic drugs against the risk of relapses. Little is known about the actual treatment patterns in these women.

Objectives: To investigate the psychopharmacological drug utilization patterns before, during and after pregnancy among women with bipolar disorder.

Methods: We conducted a register-based cohort study among all Danish women aged 15-55 with a diagnosis of bipolar disorder registered in the Danish Psychiatric Central Research Register, who gave birth to their first and singleton child between January 1997 and December 2012. Psychotropic drug use was determined from 1 year preconception to 1 year postpartum by prescriptions obtained from the Danish National Prescription Registry.

Results: We included 336 women. The proportion of women redeeming prescriptions for any psychotropic drug decreased during pregnancy, from 54.8% in the 3 months preconception to 36.6% in the third trimester. Lithium dosing increased significantly during pregnancy. Antidepressants were the most commonly used psychotropic drugs before, during and after