

National Prescription Register. Cox proportional hazard regression models were used to calculate the hazard of miscarriage in women with a partner exposed to methotrexate. The study was approved by the Danish Data Protection Agency (2015-41-4309). **Results** We identified 1,364,063 registered pregnancies with known paternity, of whom 520 fathers were exposure to methotrexate within the three months before conception to the end of the first trimester. Among these, 46 (8.9%) experienced a miscarriage compared to 122,926 (9.0%) among the unexposed.

There was no increased risk of experiencing a miscarriage in pregnancies to men exposed to methotrexate before pregnancy compared to unexposed (adjusted hazard ratio 0.99 (CI95% 0.67- 1.46)). Furthermore, we found no increased risk of experiencing a miscarriage in pregnancies to men exposed to methotrexate during first trimester compared to unexposed (adjusted hazard ratio 0.90 (CI95% 0.61-1.32)).

Conclusion We found no association between paternal exposure to methotrexate before and during early pregnancy and miscarriage. Available data suggest that paternal methotrexate exposure should not be of major concern. Multinational recommendations could be changed accordingly.

Disclosure(s) Nothing to disclose

P07 ROXITHROMYCIN IN EARLY PREGNANCY AND THE RISK OF MAJOR CONGENITAL MALFORMATION: A REGISTER BASED NATIONWIDE COHORT STUDY

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Background Medicine use during pregnancy often causes concern for fetal harm. Roxithromycin, a macrolide antibiotic, is regarded as inadvisable to use during pregnancy due to lack of safety data. However, alternative macrolides have been associated with adverse outcomes in pregnancy. We conducted a register-based nationwide cohort study testing the hypothesis that use of roxithromycin in the first trimester is associated with major congenital malformations.

Methods We included all Danish women giving live birth from 1997 to 2012. Women with at least one redeemed receipt of roxithromycin during first trimester were regarded as exposed. Multivariable logistic regression adjusting for maternal age, multiple birth, parity, year of conception, smoking, educational length, and household income was performed, supplemented by sensitivity analyses comparing unexposed with exposure to increasing accumulated doses of roxithromycin.

Results The study included 966,372 pregnancies of which 2,430 children were born to an exposed mother, 78 (3.34%) of the exposed children were diagnosed with a major congenital malformation compared with 33,609 (3.49%) among children born to unexposed mothers. The odds ratio for the occurrence of a major congenital malformation after exposure to roxithromycin was 0.96 (95% CI 0.76-1.20) and multifactorially adjusted 0.94 (0.74-1.18). Sensitivity analyses comparing unexposed with exposure to increasing accumulated doses of roxithromycin showed no dose response relationship. Further, no differences in the type of major malformation according to the EUROCAT subgrouping system were seen.

Conclusions We found no association between exposure to roxithromycin in the first trimester of pregnancy and major congenital malformations.

Disclosure(s) Nothing to disclose

P08 IS THERE A DIFFERENCE IN THE FREQUENCY OF MANIPULATED ORALLY AND RECTALLY ADMINISTERED MEDICINES TO PAEDIATRIC IN-PATIENTS IN SWEDEN IN THE YEAR 2009 AND 2018 RESPECTIVELY? A REGISTER STUDY

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Background Since there is a lack of drugs in suitable strengths and child-friendly dosage forms, manipulation is sometimes necessary in paediatrics. A manipulation is the physical alteration of a drug dosage form with the purpose to extract and administer the prescribed proportion of a drug dose.

The purpose of this study was to calculate the frequency of manipulated medicines administered to paediatric in-patients at a large Children's Hospital for two separate years and compare whether there has been a change in practice.

Material and Methods Data were collected for all administered doses during 2 separate years (2009 and 2018) at the paediatric wards at our Children's Hospital, from a hospital-based electronic register. All administered doses where the number of tablets or suppositories were decimal were added and calculated as a percentage of the total number of oral and rectal administrations. Data are anonymous but information regarding gender, age, hospital ward and number of drugs per patient were available and were analysed.

Results In one year, approximately 450 000 doses of medicine are administered to paediatric patients in our Children's hospital.

The results will be analysed with regards to differences between patient age, gender, prescribing year and drug substance. A pilot study showed that 10% of all solid oral administrations to patients 6 - 12 years old, were part of a tablet. For patients 0 - 2 years over 20% of all solid rectal administrations were part of a suppository.

The extent of manipulation is affected by a lot of factors, where the most prominent is whether there are strengths suitable for that age-group available on the market or not.

Conclusion Most often there is a lack of knowledge how manipulation of medicines influences the dosing accuracy and often we do this to our most vulnerable patients.

Disclosure(s) Nothing to disclose

P09 SERUM NEUROFILAMENT LIGHT CHAIN LEVELS ARE AN INDEPENDENT PREDICTOR OF NEURODEVELOPMENTAL OUTCOME IN PRETERM INFANTS

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