

# Drugs and pregnancy: 5 year experience at the Teratologic Service of the Azienda Ospedaliero-Universitaria of Udine

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## Introduction

Couples do not plan pregnancy all the times. For this reason pregnant women might unconsciously assume dangerous drugs or be exposed to radiations or infections with potential harm for the fetus. The presence of a Teratologic Service providing pharmacological evaluations on the teratologic risk associated to medications could help women and clinicians in taking the most reasonable decisions.

The aim of this study is to present data on the first 5 years of activity of the Teratologic Service operating in our University Teaching Hospital, focusing in particular on reporting the drug categories most frequently observed along with maternal and fetal outcomes, whenever assessable.

## Material and methods

This study is based on clinical information collected during ambulatory visits performed from January 2007 to December 2012 at the Teratologic Service of our University Teaching Hospital. Data on maternal age, gravidity, maternal health status, type of drugs and exposure-related characteristics (total daily dosage, overall time of drug exposure, time of drug suspension) were collected.

Scientific counseling on prenatal exposure was provided by a clinical pharmacologist, with specifics on the type of risk according to the available evidence-based literature and suggestions of appropriate tests for prenatal diagnosis as well.

## Results

A total of 70 visits were performed in the study period. 56% of pregnant women had taken more than 1 drug, whereas 44% of women had assumed only one medication.

Overall, drugs assumed by pregnant women unaware of their relative teratologic risk and classified according to the ATC Classification System were nervous system drugs (N = 31.5%), cardiovascular drugs (C = 14%), antibiotics and respiratory drugs (J and R = 10%).

Among those women who had taken only one drug, the most frequently observed medications were nervous system drugs (N = 29%), antibiotics (J = 26%), gastrointestinal drugs and hormones such as oral contraceptives (A and G = 9.5%).

As far as childbirths are concerned, 52 women completed pregnancy successfully, 4 underwent a miscarriage at the first trimester of pregnancy, 8 obtained abortion on the basis of lay n° 194/78 while 6 were lost at follow-up.

Two malformations were found at the second trimester screening scan and were observed in fetuses exposed to fluoroquinolones for urinary infections between 7° and 14° day. One had a labiopalatoschisis and the other developed an isolated monolateral kidney dysplasia Potter II-like.

## Conclusion

Sometimes pregnant women unconsciously assume dangerous drugs. The presence of a Teratologic Service offers invaluable information on the potential risks that medications could exert on the fetus and support pregnant women who might eventually consider pregnancy's interruption on the basis of lay n° 194/78.