

Summary

This thesis describes possible embryotoxicity of new psychotropic drugs and gives a survey of the teratology. It refers the history of teratology from the period of its inception till the present and mainly the period of a big break as a consequence of the thalidomid episode. Different methods of testing embryotoxicity on laboratory animals and epidemiologic studies are used for the estimation of risk. Teratology implies also alternative methods of testing, such as CHEST (Chick Embryotoxicity Screening Test), which has a close relationship to our Division of histology and embryology of the 3rd Faculty of Medicine of Charles University. Czech Teratology Information Service (CZTIS) established 1997 in Prague serves specialists, such as genetics, obstetrics, pediatrics and psychiatrics. Its task is to give an informations about the risks of the teratogenic effects of the external environment factors, mainly drugs. Patients using mirtazapin or risperidon during pregnancy were choosen from the CZTIS database. However these groups were so small, in both cases it was impossible to elaborate valid epidemiological studies. It is very important to solve this and some other problems (for example lower follow up of cases) and to search possible ways. Antidepressant mirtazapin and antipsychotic risperidon are new drugs, and we can't be sure, how high risk they represent for the fetus during pregnancy (in FDA classification they are in class „C“). In regards to number of other drugs in psychiatry, low occurrence of risperidon and mirtazapin in the CZTIS database and frequent usage of psychotropic drugs in a combination with other drugs, it will take a long time, till we get more accurate information about their teratologic risks.