PATERNAL EXPOSURES TO DRUGS AND CHEMICALS

SUMMARY: It is unusual for an increased risk of congenital malformations to be associated with exposure to drugs and/or chemicals in the father alone, unless they cause chromosomal abnormalities/point mutations.

If damage to the testis is severe, then infertility of a permanent nature may occur. However, if the damage is less severe, there is a chance of normal spermatogenesis being restored after a few spermatogenic cycles.

At present there is insufficient evidence to justify termination of pregnancy following paternal exposure to drugs or chemicals. There is inconsistent advice as to whether or not chromosome analysis should be performed after paternal exposure to cytotoxic or mutagenic substances. In practice, it is advisable to wait about six months (two sperm cycles) after such exposures before conception is planned.

The process of spermatogenesis takes approximately 74 days to complete. As such, it can take up to three months before drug-induced effects on male reproduction become apparent.

If you have a patient with paternal exposures and require assistance in making a patient-specific risk assessment, please telephone UKTIS on 0844 892 0909 to discuss the case with a teratology specialist.

If you would like to report a pregnancy where a paternal exposure has occurred, please click here to download our pregnancy reporting form.

Disclaimer: Every effort has been made to ensure that this monograph is accurate and up-to-date. However it cannot cover every eventuality and the information providers cannot be held responsible for any adverse outcomes of the measures recommended. There is a background incidence of congenital malformations (2-3%) and spontaneous abortions (10-20%) irrespective of any drug or chemical exposure. The final decision regarding which treatment is used for an individual patient remains the clinical responsibility of the prescriber. This material may be freely reproduced for education and not for profit purposes within the UK National Health Service. No linking to this website or reproduction by or for commercial organisations is permitted without the express written permission of this service.