Tuesday, March 1, 8:00AM-12:00PM Plenary Session

Teratogen Update

Moderator: Angela Lin, MassGeneral Hospital for Children, and the Massachusetts Birth Defects Monitoring Program, DPH, Boston, MA

Evaluating The Potential Teratogenicity of an Exposure

Jan M Friedman, University of British Columbia; Child & Family Research Institute, Vancouver, BC, Canada

The only way we can ever know that an exposure is teratogenic in humans is to recognize that it causes birth defects in babies. Clinical teratology research is all about identifying when we have harmed babies as quickly and effectively as possible. We use several kinds of human data to characterize teratogenic effects – case reports, case series, pregnancy registries, cohort studies, case-control studies, and record linkage studies. Each approach can be helpful, but all have limitations as well. Drawing a causal inference requires analysis of all available data, their consistency, and their biological plausibility.

Although clinical teratology research may be difficult, it is essential. Without it women may not receive treatments that benefit their own health or that of the fetus, and they may be advised or choose to terminate pregnancy to avoid risk. Moreover, lack of knowledge about teratogenic risks means that babies are being harmed unnecessarily.