Cancer Risk Shown to Be No Greater in Children Born Through IVF

The biggest study of its kind to date found that children born from IVF are at no more risk of developing the most common childhood cancers compared to children conceived naturally.

The Challenge

In 2010 nearly 14,000 babies were born following in-vitro fertilisation (IVF). Some previous studies have suggested the possibility an increased risk of developing cancer in children born after assisted conception in developing cancer, but studies using data consisting of very large numbers of these children were needed to reliably estimate such a possible risk.

The Research

In the biggest study of its kind, a team from UCL examined the health records of more than 100,000 children up to the age of 15 who were born as a result of IVF. Researchers analysed anonymised linked data between 1992-2008 from the Human Fertilisation and Embryology Authority (HFEA), which records information on all UK IVF cycles and the National Registry of Childhood Tumours (NRCT) which is the largest population-based registry in the world of children who develop cancer.

The Results

Results of the study, which was larger than all previous similar studies put together and which were widely publicised in the national press, showed that compared to national rates of cancer over the same time period in children of the same gender, children born from IVF are at no more risk of developing the most common childhood cancers compared to children conceived naturally.

The Impact

These findings, based on use of high-quality, ‘big’ health record data can provide reassurance for couples considering assisted conception, children conceived in this way, their families and clinicians.

For more information about IVF visit: http://www.nhs.uk/Conditions/IVF/

Enquiries to Natalie Fitzpatrick, Data Facilitator, The Farr Institute of Health Informatics Research, n.fitzpatrick@ucl.ac.uk

Carrie Williams, Beverley Botting and Alastair Sutcliffe, University College London
Kathryn Bunch, Charles Stiller and Michael Murphy, University of Oxford
Hamish Wallace, Royal Hospital for Sick Children, University of Edinburgh
Melanie Davies, University College London Hospitals