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Perspective

Fertility Treatments Have Been Related to an Increased Risk of Birth Abnormalities

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INTRODUCTION

According to the most thorough study of its kind, abies produced using routinely available reproductive medications are approximately 50 percent more likely to suffer a birth defect than those conceived spontaneously, according to a team from the University of Adelaide [1].

The study discovered that those created by in vitro fertilisation (IVF) have a 25% increased risk of having a congenital abnormality.

Researchers from the University's Robinson Institute assessed the likelihood of significant birth abnormalities associated with each of the regularly used reproductive procedures around the world, including IVF, ICSI, and ovulation induction.

They also looked at the likelihood of birth abnormalities after transferring fresh and frozen embryos. A census of more than 6100 assisted reproductive technology births in South Australia was linked to a register of more than 300,000 births and 18,000 birth abnormalities, according to the researchers. They compared the chances of birth abnormalities from all infertility treatments to pregnancies in women who had never been pregnant before and looked at women's subsequent pregnancies [2]. In aided conception pregnancies, the chance of any birth defect was 8.3 percent (513 deformities), compared to 5.8 percent in non-assisted conception pregnancies (17,546 defects).

While assisted reproductive technologies are linked to a higher risk of serious birth abnormalities in general, we discovered significant heterogeneity in risk amongst treatments. Birth abnormalities were also substantially related with a history of infertility, whether with or without assisted conception. While patient characteristics explained the increased risk connected with IVF, patient factors could not easily explain the increased risk associated with a number of other therapies." ICSI, for example, increased the chances of a serious defect by 57 percent, albeit the risk was still minor in absolute terms [2].

In especially for ICSI, cryopreservation - or freezing - of embryos was linked to a significantly lower risk of birth abnormalities. This could be owing to developmentally damaged embryos failing to survive the freeze/thaw process. The tripling of risk in women who used clomiphene citrate to promote ovulation outside of a properly supervised clinical setting was also cause for concern. While our study was limited to a small population, this is a matter for concern because clomiphene citrate is now readily available at a low cost and may be used despite manufacturers' explicit advice to avoid usage if pregnant because it can cause foetal abnormalities.

Future research will be required to confirm this element of the study. The big question underlying the link between assisted reproduction and congenital anomalies, according to Medical Director at IVF Australia and Associate Professor at the University of Sydney, was whether it was due to the laboratory process itself, or whether it was a reflection of the fact that people who used it to conceive already had damage to their eggs and sperm, putting them at a higher risk of having children with congenital anomalies [3].

The findings of Professor Davies point to the latter interpretation. For the first time, he has examined the siblings of children conceived by assisted reproductive technologies who were conceived naturally. He's also looked at women who came to antenatal clinics with a history of infertility but had never used assisted reproductive technology. Both of these groups, as well as children created via assisted reproduction technologies; show a comparable effect, with an increased incidence of congenital abnormalities. This is a brand-new discovery [4].

REFERENCES

1. El-Chaar D, Yang Q, Gao J, Bottomley J, Leader A, Wen SW, et al. Risk of birth defects increased in pregnancies conceived by assisted human reproduction. Fertility and sterility. 2009;92(5):1557-1561.
2. Schieve LA, Rasmussen SA, Reefhuis J. Risk of birth defects among children conceived with assisted reproductive technology: Providing an epidemiologic context to the data. Fertility and sterility. 2005;84(5):1320-1324.
3. Lambert RD. Safety issues in assisted reproductive technology: aetiology of health problems in singleton ART babies. Human Reprod. 2003;18(10):1987-91.
4. Sartorius GA, Nieschlag E. Paternal age and reproduction. Human reproduction update. 2010;16(1):65-79.

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