IVF: Solving one problem yet creating another

By ACSH Staff — April 23, 2012

Since it was first used in 1981, in vitro fertilization (IVF) has been credited with the birth of more than 4 million babies worldwide. But now a new study has found that this procedure, along with another assisted reproductive technology called ICIS (intracytoplasmic sperm injection), significantly increases a baby's risk of birth defects.

IVF involves fertilizing an egg with sperm in a laboratory dish and then transferring the resulting embryo into the mother's uterus. ICIS entails a similar process, except in this procedure, a single sperm is injected directly into the egg.

Published in the journal Fertility and Sterility by researchers from the Nanjin Medical University in China, the recent meta-analysis of 46 studies combined data on over 124,000 children born through IVF or ICIS and found[1] that these children were at a 37 percent higher risk of having a birth defect. While 3 percent of naturally-conceived births involve a birth defect, the rate of defects among IVF babies is about 4 percent.

In addition, the researchers found that these birth defects were present across a range of body systems, including the skeleton, digestive system, genitalia, and nervous system. What the authors were unable to determine, however, was why IVF and/or ICIS would lead to such malformations. They posit that perhaps the procedures themselves are responsible. Alternatively, they suggest that birth defects might only appear to be more common among IVF and ICIS babies because these children are monitored more closely than others.

ACSH's Dr. Gilbert Ross notes that IVF has been a huge boon to couples yearning for a child but are unable to reproduce. It seems that the real but minimal increased chance of birth defects found in this study is a risk most such couples will chance to take although of course it should be thoroughly discussed beforehand.