Children Conceived by In Vitro Fertilization Perform Well on Standardized Achievement Tests

Couples who are considering IVF should be reassured of normal cognitive development in IVF children.

Children conceived by in vitro fertilization (IVF) are at risk for prematurity, adverse perinatal outcomes, and certain birth defects. But just how well do IVF children develop cognitively? Investigators in Iowa compared scores of 423 IVF children (age range, 8–17 years) on the Iowa Tests of Basic Skills/Educational Development with those of comparator children matched with each IVF child by sex, grade level, calendar year of testing, and school district.

Most parents of IVF children were white, college educated or higher, and married at study entry. Almost half (48%) of IVF children were singletons, 42% were twins, and 10% were triplets. Test scores of IVF children were higher than national mean scores ($P<0.0001$) as well as scores of their matched peers in grades 3 through 11. A nonsignificant trend toward lower test scores was observed in twins and triplets. Particulars of IVF protocols (e.g., cryopreservation of embryos, intracytoplasmic sperm insemination) did not affect test scores.

Comment: This is the largest report to date of academic performance in children who were conceived by IVF. Standardized test scores correlate well with school grades and college admission test scores and are good predictors of adult IQ. The authors had no data about educational level and marital status of parents in the comparator cohort; thus, we do not know the extent to which better performance of the IVF children in this study is related to their environment. The more important point is that IVF children did not perform less well than their peers, a finding that should provide reassurance to couples who are considering IVF.

— ***Robert W. Rebar, MD***

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