

based on the Illinois Test of Psycholinguistic Abilities, standardized in healthy Greek children.

RESULTS: Children with IGE performed significantly poorer in all subtests except the auditory closure subtest (Table 1). No significant difference was found between the 2 subgroups. A negative correlation was found between disease duration and the score in auditory memory ($r = -0.368$; $P = .025$).

TABLE 1. Athina Test for the Diagnosis of LDs

	Subjects With Inadequate Performance, %		P
	Children With IGE	Healthy Children	
Auditory memory	64.9	9.0	.000
Visual memory	43.2	9.0	.000
Grammatic closure	43.2	9.0	.000
Auditory closure	16.2	9.0	.125
Graphophonological awareness	32.4	9.0	.000
Visual-motor coordination	43.2	25.0	.010

CONCLUSIONS: Our results suggest an increased risk of LDs in children with IGE and well-controlled seizures. Early detection of the cognitive impact of IGE and subsequent intervention are needed to prevent educational underachievement.

MULTIDISCIPLINARY MEDICAL EVALUATION OF CHILDREN YOUNGER THAN 7.5 YEARS BORN AFTER PREIMPLANTATION GENETIC DIAGNOSIS FOR MONOGENIC DISEASES

Submitted by Loretta Thomaidis

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INTRODUCTION: The growing cohort of children conceived after preimplantation genetic diagnosis (PGD) techniques underlines the importance of evaluating potential risks for their developmental outcome. There are some data concerning the incidence of congenital anomalies, medical status, and cognitive development of children conceived after PGD techniques, based mainly on reports and not on objective medical evaluation.

OBJECTIVE: We sought to perform multidisciplinary evaluation (physical, genetic, and developmental) of 31 children conceived after PGD techniques (aged 30 days to 7.5 years) and the stress level of parents who used PGD regarding their parental role.

METHODS: Among 24 couples at risk for transmitting monogenic diseases and with an unsuccessful reproductive history, 31 children conceived after PGD techniques were examined. Genetic examination was performed by 2 independent geneticists, and developmental assess-

ment included formal testing of cognitive and motor skills (Bayley scales, Griffiths scales, Athina test). Parental stress was measured by using the Parent Stress Index-Short Form (PSI-SF), a self-report questionnaire that assesses parental stress. The PSI-SF was also completed by 35 parents of naturally conceived, healthy children matched for age, gender, and socioeconomic level.

RESULTS: A high rate of cesarean deliveries were reported, but no higher risk was found for perinatal complications. The increased incidence of prematurity and low birth weight among children conceived after PGD techniques did not seem to affect their growth development later in life. Major malformations (cardiac, gastrointestinal, urogenital, skeletal) were present in 4 (12.9%) of 31 children, with a discrepancy between singletons and multiples. A significant number of children conceived after PGD techniques (6 of 31 [19%]), mostly multiple, premature, and small-for-gestational-age infants, experienced low levels of cognitive, verbal, and perceptual abilities (Global Development Quotient scores of <85). Parents who used PGD experienced lower levels of parenting stress compared with controls ($P < .05$).

CONCLUSIONS: Children conceived after PGD techniques seem to be at greater risk for exhibiting congenital malformations and lower cognitive skills. Whether these observations are linked to the PGD procedure itself, rather than to subfertility, multiplicity, or prematurity, is a question that is difficult to answer. An unexpected finding was that once parents who used PGD finally had what they struggled for (a healthy infant), the stresses of parenthood may have been offset by a broader sense of fulfillment.

LINGUISTIC DEVELOPMENT OF CHILDREN WITH WILLIAMS SYNDROME: A CONTROL STUDY

Submitted by Loretta Thomaidis

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INTRODUCTION: Williams Syndrome (WS; Online Mendelian Inheritance in Man No. 194050) is a rare

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