67 IS LANGUAGE A BARRIER TO THE CANCER CARE OF HISPANIC CHILDREN OF NON-ENGLISH SPEAKING (NES) PARENTS? Myra Saltoun, Susan Jay, Lonnie K. Zeltzer. Univ. of Southern California School of Medicine, Childrens Hospital of Los Angeles, Behavioral Science Section, Div. of Hema/Onc, Los Angeles, CA.

To determine if Hispanic children of NES parents differ in their adaptation to the cancer experience and in their perceived care, 23 Anglo, 15 English speaking (ES) and 22 NES Hispanic parents were evaluated within one month following their child's diagnosis. Areas of assessment included: knowledge of treatment and disease, impact of illness on the family, psychological adjustment, satisfaction with clinic services, and available social support. Compared to both Anglo and ES Hispanic parents, NES parents had significantly less knowledge of their child's disease, more personal strain, less satisfaction with the technical competence of their child's physician, less satisfaction with the personal style of clinic nurses, and less overall satisfaction with clinic services (all p<.01). Both Hispanic groups had significantly less knowledge and social support than did Anglo parents (p<.01). Despite the ethnic differences identified above, overall psychological adjustment among the three groups was similar, with the exception that Anglo parents reported more hostility (p<.01). The findings suggest that language is a significant barrier to acquisition of knowledge and satisfaction with care for parents of children with cancer. While no specific psychological problems were identified, the need for educational and social support services are suggested.

†68 MOTOR ASSESSMENT OF COCAINE-EXPOSED INFANTS. Jane Schneider and Ira Chasnoff (Spon. by James Stockman III). Northwestern Univ. Med. School, Depts. of Pediatrics & Psychiatry, Chicago.

No assessment of development of cocaine-exposed infants beyond the neonatal period has as yet been published. The Movement Assessment Inventory (MAI) is designed to evaluate muscle tone, primary reflexes, automatic reactions and volitional movement in the first year of life. The test at 4 months of age provides an assessment of risk for motor dysfunction. A group of 15 full-term cocaine-exposed infants was compared to a control group of 50 full-term infants at 4 months of age. The 2 groups were similar for gestational age and maternal gravidity, age and racial distribution. There was a significant difference in total risk score (t test, P<.01) for the 2 groups of infants (cocaine=10.6±3.6 vs control=6.6±3.8). A breakdown of risk scores revealed significant differences (cocaine vs controls, t test, P<.05) in muscle tone (3.85 vs 1.94), reflexes (2.77 vs 1.54) and volitional movements (1.69 vs 1.04). Placement of infants within previously established ranges of risk scores (0-7=no risk, 8-13=questionable, 13=high risk) revealed a significant difference in distribution (X^2, P<.01):

	No risk	Questionable	High risk
Cocaine (%)	23	39	39
Controls (%)	70	28	2

Although previous studies of the effects of intrauterine exposure to substances of abuse have not revealed significant differences in motor development as measured by the Bayley Scales of Infant Development, it appears that the MAI has demonstrated qualitative differences between cocaine-exposed and normal infants.

69 ECOLOGICAL FACTORS IN PHYSICAL CHILD ABUSE IN ISRAEL. Elizabeth Seagull, Abraham Sagi, Michael Jaffe, Emmanuel Tirosh, Miri Sharf, Kathleen Lewkowicz, Daniela Adam, Arthur Seagull (Spon. by Ray Helfer). Mich. State U., College of Human Medicine, Dept. of Pediatrics/Human Development, E. Lansing (Sr. author).

Israel is a "natural laboratory" for studying child abuse due to the low rate of abuse despite high levels of parental stress. This ecological study examined cultural, social and psychological factors in physical abuse. Twenty-five abused Jewish Israeli children aged 1 to 6 years were matched with the same number of non-abused children on age, sex, family size, ethnic background, SES, parent marital status and health. Blind interviews using reliable and valid measures were done separately with mothers and fathers in their homes. Statistical analyses found abusive mothers were twice as depressed as matched mothers (p<.003) on the Beck Depression Inventory. They provided a less stimulating home environment p<.05) as measured by the HOME, and perceived more stress in their relationship with the target child (p<.056) on the Child Domain of the Parenting Stress Index (PSI). Significant differences were also found on two subscales of the PSI; abusive mothers reported their children as more demanding (p<.026) and less reinforcing (p<.012). No group differences in social support were found on the Interview Schedule for Social Interaction for mothers or fathers. Both groups of parents rejected corporal punishment as a disciplinary method, endorsing, instead, using praise. Thus, although psychological and parent-child interactional factors were found to be similar to those in abusive families in other cultures, Israeli children may be more protected from abuse by the relative lack of social isolation and by cultural norms against corporal punishment.

†70 THE EXPANDED NEUROLOGIC EXAMINATION (ENE): DOES IT HELP? B.K. Shapiro, F.B. Palmer, R.C. Wachtel, S. Antell, L. Tislenko, A. Ross, A.J. Capute. The Johns Hopkins Medical Institutions, Departments of Pediatrics and Biostatistics, The Kennedy Institute, Baltimore, Maryland.

To test if the ENE would improve identification of developmental dysfunction (DD), a standard ENE was administered to 275 5-year-olds. Psychologic and education tests were administered concurrently. The ENE covered five areas: 1) Behavioral-Hyperactivity, 2) Soft Signs, 3) Hard Signs, 4) Visual Motor, and 5) Language Memory. Area scores were derived by adding normalized values of individual test items. Three adverse outcomes which did not depend on ENE area scores were defined: Delay in cognition or academic unreadiness; Discrepancy between language and visual motor development; Clinical impression of neurologic abnormality. A discriminant function approach was used to find weights for combinations of area scores as predictors of adverse outcomes. Classification errors were converted to sensitivity and specificity and are shown for delay in cognition or academic unreadiness.

Area Score	1	2	3	4	5	Combined
Sensitivity	0.92	0.77	0.54	1.00	0.85	0.92
SE	0.07	0.12	0.14	--	0.10	0.07
Specificity	0.74	0.94	0.74	0.92	0.82	0.96
SE	0.03	0.02	0.03	0.02	0.03	0.02

Although the ability of the full ENE to classify children was good for all three adverse outcomes, using all five areas did not substantially improve error rates over single areas. No single area in the ENE was consistently superior to any other.

The data support the idea that DD in 5-year-olds is pervasive, and that full evaluations may be unnecessary for identification.

71 PREGNANCY MANAGEMENT OF DIABETES AND TWO YEAR NEURO/ DEVELOPMENTAL OUTCOME OF INFANTS OF DIABETIC MOTHERS. Jean J. Steichen, Paula A. Steichen Asch, Reginald C. Tsang. University of Cincinnati Medical Center, Departments of Pediatrics and Psychiatry, Cincinnati, Ohio.

Infants of diabetic mothers (IDM) are at a risk for congenital anomalies and long term neurological/developmental dysfunction. In a prospective longitudinal study, IDMs born to mothers randomly assigned during the first trimester of pregnancy to Group I -strict diabetes management- or Group II -customary diabetes management- were evaluated to examine treatment impact on short and long term outcome. Thirty-four infants have been followed for 2 years with repeat neurological and psychological assessments. At birth, Group I IDMs had a larger head circumference (t=2.67, p<.01) and were longer (t=2.11, p<.05) than Group II infants. At 8 and 12 months, Bayley mental indices (MDI) were higher for Group I (MDI-111 and 110 respect.) than Group II (MDI=99 and 103 respect.). T-tests and F values were significant at <.01 and <.05 levels respect. There were no differences for Bayley motor indices PDI (Group I, PDI=102 and 109; for Group II, PDI=102 and 104). Differences had disappeared at 18 and 24 month. White classification correlated with poor neurological performance using the Amiel-Tison neurological assessment at 12 months (R=.33, p <.10). Thus, it appears that IDMs born to mothers with strict diabetes management in early pregnancy have a better short term prognosis for mental and neurological outcome. Long term follow-up of more IDMs now in progress is necessary: (1) To obtain a more detailed picture of subtle neuro/developmental delay in the IDM. (2) To assess whether early mental scores and neurological signs are indicators of functional/intellectual deficits in later life; and whether early first trimester strict diabetes management has a positive effect on long term outcome.

72 NEUROBEHAVIORAL MEASURES RELATE TO GESTATIONAL MATURITY AND NOT TO HYPOCALCEMIA OF PREMATURITY. Paula A. Steichen Asch, Jean J. Steichen, Reginald C. Tsang. University Of Cincinnati Medical Center, Departments of Psychiatry and Pediatrics, Cincinnati, Ohio.

This study examined the dependability of repeated systematic moment-to-moment observations of neurological signs in detecting early hypocalcemia of prematurity. Seventeen preterm appropriate-for-gestational age newborns (PT/AGA) 29-32 weeks gestational age (GA); birthweight (BW) 830-1490 grams; 1 minute Apgar 0 to 8; 5 minute Apgar 1 to 9; 13°F and 4 M) were observed live by two trained raters on three 20 minute occasions every day for the first 5 days. The behavioral coding system consisted of 11 general categories (each with specific behaviors) including: state control, vocal and visual behavior, fine motor coordination, limb, head and hand movement (smooth versus jerky; symmetric versus asymmetric). The system was reliable across raters but there were no dependable trends over time. Correlational analysis was done on frequency and duration scores averaged over raters and sessions. Across most behaviors, there were consistent and significant individual differences related to GA and 1 and 5 minute Apgar scores (Pearson r between .48 and .73, p<.05): Higher GA and BW, and higher Apgar babies exhibited more alertness, more REM sleep, smoother and more coordinated movements of limbs and hands. Lower GA and BW, and lower Apgar babies had more jerky movements, were less coordinated and had poorer state control. Seven of 17 infants were hypocalcemic (Ca<6.5 mg/dl) during the first 36 hours of age; hypocalcemia and blood calcium did not relate to neurobehavioral signs (p>.10). In conclusion, neurobehavioral signs attributed to hypocalcemia are more likely due to gestational immaturity and lower Apgar scores rather than to hypocalcemia in the PT/AGA.