

**85** FOLLOW-UP OF TERM INFANTS AT RISK FOR SIDS. Harry Mondestin, Francoise Marotta, Maria Fort, Barbara Ostfeld, I. Mark Hiatt, Thomas Hegyi, UMDNJ-Rutgers Medical School, St. Peter's Medical Center, Department of Pediatrics, New Brunswick, New Jersey

Home monitoring did not interfere in the developmental status of a group of term infants at risk for SIDS. Eleven infants (BW 3.50±0.80kg) were managed on home monitors due to the presence of specific risk factors (near miss, sibling of SIDS apnea). Evaluation included ventilatory response studies to CO<sub>2</sub> with a computerized CO<sub>2</sub> waveform analyzer. Five infants had abnormal (13.7±4 mm/kg/min/mmHg BTPS) and six normal (36.3±15.8 mm/kg/min/mmHg BTPS) responses (P < 0.05).

Follow up examinations occurred at 6 months postnatal age with the Bayley Scales of Infant Development. All infants had normal MDI and PDI. Comparing the groups with normal and abnormal ventilatory responses, we noted similar MDI (119±12 vs. 124±14), PDI (115±10 vs. 110±18), and absolute MDI-PDI differences (16±11 vs. 14±8). No correlations could be demonstrated between slope and any of the developmental factors.

Home monitoring allows for the normal development of high risk infants. Abnormalities demonstrated early in the control of ventilation did not affect outcome in these infants.

**86** LACK OF PREDICTIVE VALIDITY OF EARLY NEUROMOTOR DYSFUNCTION IN INFANTS. Linda J. Morgan and Carol B. Andrew (Spon. by Robert Z. Klein), Department of Maternal and Child Health, Dartmouth Medical School, Hanover, NH.

The Movement Assessment Index, a standardized neuromotor examination developed at the University of Washington, Seattle, was used at four months to evaluate four areas: muscle tone, primitive reflexes, automatic reactions and volitional movement. There were 135 infants examined at 4 and 12 months as part of the ICN Follow-up Program. Eighty-two infants (61%) were classified as normal at 4 months, 1 had subsequent evidence of spastic diplegia. Twenty-five (18%) were in the suspicious range, 3 were subsequently found to have cerebral palsy. Twenty-eight (21%) were in the abnormal range, 9 subsequently had cerebral palsy. Developmental outcome was assessed with the Bayley Scales. Seventy-three infants in the normal category at 4 months scored ≥85 at 12 months (89%); 17 infants suspicious at 4 months (68%) and 13 in the abnormal category (46%) were functioning at this level. Ten infants in the abnormal category had MDIs < 50 while no infants in the other categories showed such developmental dysfunction. Although there is a linear relationship between neuromotor assessment at 4 months and subsequent 12-month performance across the entire group, the relationship is not sufficient for a clinical prediction in an individual case. Use of 4-month categories would significantly over-identify infants as having neurodevelopmental difficulties at 1 year. Infants incorrectly classified were predominantly prematures who had transient dystonia.

**87** THE EFFECT OF CULTURE, PHYSICIAN & INCOME ON INFANT FEEDING PRACTICES (IFP), Dianne Murphy, Jean Craig & Sylvia Padilla. (Spon by PA Brunell) Dept. of Peds. U of Tenn Memorial Research Center and Hospital, Knoxville, Tenn U of Texas Health Science Center, San Antonio, Texas.

IFP may influence overall health outcome. Breastfeeding (BF) months of bottle feeding (MB), use of cow's milk (CM), use of bottle in bed (BB), age beikost introduced, use of infant force feeders (FF) and resources for nutritional information (NI) are factors which influence nutritional status. IFP are determined by ethnicity, health care provider (HCP) and income level. We assessed reported IFP and maternal knowledge of IFP recommended by the AAP in economically and culturally different health care groups. A bilingual Mexican-American interviewed 4 patient groups (N=277): 1) 75% Hispanic (HS) clinic population (N=142), 2) Hispanic private practice (N=45), 3&4) Two Anglo private practice (N=89). Significant differences (p<0.05) existed in both demographics and IFP, within and between the four groups. Demographically, the HS group was heterogeneous. Ethnicity significantly influenced NI and the following IFP's: frequency of BF, MB, use of FF and CM. After controlling for ethnicity, HCP influenced NI and BF, use of BB, and CM. BF remained significantly different by HCP, after controlling for ethnicity and income. HS breastfed significantly less than anglo (23% vs. 50%), while blacks introduced CM earlier (8.2 vs 10.4 mos) and used FF significantly more often (30.8% vs. 1.2%). Only 46% of low income mothers followed physician's advice on IFP. Some IFP appeared influenced by ethnicity and others by the HCP and/or level of income.

**88** THE IMPACT OF PATIENT EDUCATION ON CHRONICALLY ILL CHILDREN. David Nara, Mark Weatherly, Elizabeth Seagull, and Dennis Murray (Spon. by Marshall Klaus). Department of Pediatrics/Human Development, Michigan State University, East Lansing, MI.

An investigation of the impact of patient education on chronically ill children to ascertain if a child's comprehension of illness is accelerated in relation to Piaget's stages of development has not been attempted previously. We have evaluated various aspects of a child's comprehension of illness from established (≥ 6 visits) patients attending the M.S.U. Pediatric Endocrinology, Oncology, and Nephrology clinics. Children without chronic disease attending a general pediatric clinic served as controls. Age groups of 5-9 and 10-14 years were studied. A single questionnaire-interview was administered to each child separately by one interviewer. Seventeen questions were asked in 3 different categories: general medically related (9); specific disease (4); and non-medical or neutral (4). Responses were recorded and later scored by both the interviewer and an independent evaluator using an established coding scale. Ninety-one children were interviewed. Children within both age groups scored higher on neutral questions than either the medically related or specific disease questions. Within each age group, chronically ill children did not differ from controls on mean scores of medically related questions. Comparing the two age groups, significantly higher mean scores on medically related questions were identified from the older children in each clinic except for Oncology clinic. Patient education does not appear to accelerate a chronically ill child's comprehension of illness.

**89** EARLY MOTOR ASSESSMENT OF THE ≤1,200 GM PREMATURE Michael N. Nelson, Mary E. A. Bozynski, Diane Genaze, Celene Rosati-Skertich, Karen J. O'Donnell, Patricia M. Naughton, Werner A. Meier (Spon. by Joseph R. Christian), Rush Medical College, Rush-Presbyterian-St. Luke's Medical Center, Department of Pediatrics, Chicago.

The Bayley Scales are widely used to measure both mental and motor development of high-risk premature infants, but vary dramatically between ages in the comprehensiveness of assessment. Our follow-up of 75 ≤1,200 gm infants has employed both the Bayley and the Milani-Comparetti to improve our definition of the specific motor deficits of premature infants with a history of intracranial hemorrhage (ICH). Thirty-five (46.7%) of our infants experienced ICH originating in the germinal layer, with 27 of the 35 showing no further extension of the hemorrhage. Motor assessments performed during the first 2 years revealed persistent motor delay in the ICH group beginning at 4 mo. of age. Gross motor skills were primarily affected, with delayed postural reactions and walking in the ICH group. Differences seen at 1 yr persisted through the second year. Infants at highest risk were those who showed persistent ventriculomegaly (VM) or abnormal periventricular morphology (APM) through term gestational age, but this finding was at least partially determined by the nature of the assessment scale. ICH per se, without associated VM or APM, conferred no special risk after 4 mo. on the Bayley Scales, but was associated with significantly poorer postural reactions on the Milani-Comparetti at 12 mo. corrected age. Both scales agreed, however, in showing poorest outcome for ICH infants with VM or APM diagnosed by ultrasound at term gestational age.

**90** FAMILY VARIABLES IN THE FOLLOW-UP OF PREMATURE INFANTS Karen J. O'Donnell, Patricia Naughton, Michael N. Nelson, Mary E. Bozynski, Diane Genaze, Celine Rosati-Skertich (Spon. by Joseph R. Christian), Rush Medical College, Rush-Presbyterian-St. Luke's Medical Center, Department of Pediatrics, Chicago.

The importance of family variables for the development of the premature newborn and the provision of adequate follow-up care was examined. Data were collected on infant medical status, characteristics of the primary caregiver, and variables in the broader family context thought to interact dynamically to affect the developing infant and family. 23 high risk infants (25-32 weeks gestation) and their mothers were assessed three times during the early postpartum months, and compared with 23 low risk infants and their mothers given parallel evaluations. The low risk infants were matched on race, sex, education of the mother, and marital status of the mother. Persistent differences were found between the high and low risk infants through four months of age on both behavioral and developmental exams. The two groups of mothers also differed significantly on measures of anxiety and psychological discomfort. Variability in maternal distress for the mothers of high risk infants was not associated with the infant's biomedical problems in the perinatal period or with the results of behavioral or developmental assessments of the infant. Instead, maternal distress reflected the level of social supports available in the broader family context, with low social supports related to increased distress. The findings indicated that having a baby prematurely is a very powerful perturbation for the mother, and that family and community support may be able to buffer her distress.