

37 MATERNAL/NEONATAL INCEST: A NEWLY RECOGNIZED FORM OF CHILD SEXUAL ABUSE. Ira Chasnoff, Gay Chisum and Linda Kyle-Spore. (Spon. by Kenneth Rich). Northwestern University Medical School, Departments of Pediatrics and Psychiatry, Chicago.

The least reported form of incest is mother/son, and even more rarely reported is mother/infant sexual abuse. Four women enrolled in the Perinatal Addiction Project of Northwestern University reported manual stimulation of their infant son's genitals, fellatio, and use of the child for masturbation beginning in the neonatal period and lasting through 18 months of age. These 4 women (Group I) were compared to a group of 5 age- and income-matched substance-abusing women who had no evidence of sexually misusing their infant sons (Group II). Two of the Group I women had a history of incest during their own childhood and 3 had been raped. None of the Group II women had a history of incest but 2 of these women had been raped. In Group I, 1 woman was heterosexual, 1 woman homosexual and the other 2 women bisexual. All women in Group II were heterosexual. All women in Group I lived alone and expressed feelings of isolation with no sexual outlet available, while Group II women had a steady sexual relationship and had no evidence of physical or emotional isolation. All Group I women had been diagnosed prenatally as Borderline Personality on the DSM-III code, while 2 of the women in Group II had a diagnosis of Borderline Personality and 3 had no major psychiatric diagnosis. Health care professionals should be alerted to the possibility of maternal/neonatal incest and predisposing factors in the maternal history, including chemical abuse, social isolation and psychological makeup.

38 PREDICTORS OF DEVELOPMENTAL OUTCOME AT 12 MONTHS OF <1250 GRAM INBORN NEONATES. Cheryl Cipriani, Marilyn Escobedo, Leonard Hilliard, Maria Rendon, Carolyn McLerran, Jill Schlänsker, (Spon. by YW Brans) The Univ of TX Health Sci Ctr at San Antonio, Dept of Pediatrics and South Texas Newborn Associates, San Antonio.

Prediction of poor developmental outcome (MDI or PDI <68, 2SD below the mean) in very low birthweight (VLBW) infants (<1250 gms.) at time of hospital discharge would facilitate early intervention and parental counseling. All VLBW infants born at Medical Center Hospital were followed for 2 years in a program providing periodic developmental evaluation. Of 17,694 infants born in 1979-1981, 166 (0.9%) weighed <1250 gms. and 76 (46%) survived. Of these, 56 (74%) have been successfully followed for at least one year. Mean birthweight and gestational age were 1024 gms. (range 709-1250) and 29 weeks (range 25-37). Mean MDI on the Bayley exam was 96 (range <50-140) and mean PDI was 88 (range <50-122). Nine infants (16%) had a MDI or PDI score <2SD below the mean. The following parameters were examined as single strong predictors of poor outcome: Apgar scores 0-3, presence of intraventricular hemorrhage, duration of time on ventilator or oxygen, parental age, parental education, family income, mode of delivery, and presence of apnea. Poor outcome was positively correlated with apnea (p=.03). Apnea requiring ventilation was an especially strong predictor of poor outcome (p=.002). Although other factors in combination may predict poor outcome, we suggest that VLBW infants with apnea, especially apnea requiring ventilation, be identified as particularly at risk for poor developmental outcome.

39 AUTONOMY IN TODDLERS. James R. Cooley and Michael W. Yogman (sponsored by Eli Newberger) Harvard Medical School, Children's Hospital, Dept. of Peds., Boston.

In order to understand how toddlers develop autonomy, we developed an assessment of toddler-parent negotiation of compliance and limits in a laboratory playroom. Forty healthy, first-born toddlers (22-26 months, 20 males, 20 females) were seen together with their mothers and fathers. Five minutes of free play followed by two parent-initiated limit-setting episodes, two minutes each, (a clean-up task and a prohibition) were videotaped. Independent variables were sex of child and sex of parent giving the clean-up or prohibition statement. Dependent variables of toddler compliance were 1) number of toys put away (clean-up) and 2) number of times the tape recorder was touched (prohibition). Preliminary analyses revealed that toddlers were less compliant with maternal than with paternal commands. There was a trend for boys to be less compliant than girls. Further analyses will show the relationship of parental cooperation/competition, toddler temperament, and social referencing to toddler compliance. In defining the normal range of toddler sex differences in compliance and of parents' limit-setting style, this paradigm is useful for assessing families with concerns about their toddlers' behavioral problems, such as negativism, tantrums, and resistant behavior.

40 SPECTRAL ANALYSIS OF A CRY IS ABNORMAL IN INFANTS WHO HAVE MODERATE HYPERBILIRUBINEMIA. Michael J. Corwin, Howard L. Golub, (Spon. by Steven Gross), Boston Univ, Sch. Med., Boston City Hospital, Dept. Pediatrics, Boston.

Wasz-Hockert et al have performed spectrographic analysis of the cries of infants with marked hyperbilirubinemia (greater than 20 mg/dl) and demonstrated cry abnormalities consistent with unstable glottic function. We undertook a study to determine if infants with moderate hyperbilirubinemia also exhibit evidence of glottal instability, as evidenced by increased variability of the fundamental frequency (f0) of their cries. We analyzed the cries of 90, 3-7 day old, term AGA infants who were normal except for a serum bilirubin concentration of 10-20 mg/dl and compared them to 829 healthy infants, matched for birthweight, gestational age, and age at recording, but who were without clinical jaundice. We recorded stimulated cries for 30 sec on tape by uniform method, located periods of phonation and extracted cry parameters using spectral analysis on at least twenty consecutive 25 msec blocks during the first cry utterance. Variability of f0 (f0var) was determined by calculating the difference between the minimum f0 and the maximum f0 occurring during the cry utterance.

Although the mean f0 for the two groups of infants were similar (432±92 vs 430±82), there was significantly increased f0 variability in the jaundiced infants (f0var=429±224) when compared to control infants (f0var=354±210, p<.001).

Infants with moderate jaundice have evidence of unstable glottic function, similar to that reported for infants with bilirubin values greater than 20/mg/dl. This abnormality may be an early manifestation of the central nervous system effects of bilirubin.

41 VALIDITY OF THE KENT INFANT DEVELOPMENT SCALE (KIDS) IN VERY LOW BIRTHWEIGHT (VLBW) INFANTS. C. Cunningham, J. Reuter, M. Hack, K.S.U. & C.W.R.U., Cleve. Ohio.

Developmental status of VLBW infants (<1.5kg) is usually measured by tests requiring professional administration. Caregiver reports, however, more fully describe the range of infant behaviors and are not influenced by the testing situation.

To determine if the KIDS, a caregiver report, yields accurate developmental information with VLBW infants, 32 VLBW born in 1981, mean B.Wt. 1.3kg (range 0.8-1.4kg), mean GA 30 wks (range 26-36wks), were seen at 8 months corrected age (range 7-9 mos). Assessment included caregiver completion of the KIDS compared with a psychologist's determination of the Bayley Scales. The full KIDS yielded a mean developmental age of 8.6mos, the Bayley mental 8.5mos, and Bayley motor scale 8.4mos.

| BAYLEY SCALES | KID SCALE BEHAVIORAL DOMAINS | | | | KID SCALE Full Score |
|---------------|------------------------------|-------|----------|-------------|----------------------|
| | Cognitive | Motor | Language | Help Social | |
| Mental | .519 | .497 | .547 | .439 | .585 |
| Motor | .624 | .721 | .532 | .619 | .718 |

Correlations between the KIDS and Bayley Scales as well as the KIDS and Kent adaptation of the Bayley into behavioral domains were all significant. The sensitivity of the KIDS in relation to the Bayley mental and motor score was 100% and 67% respectively. Thus, the KIDS and the Bayley mental identified exactly the same infants as delayed. Specificity was 93% for both the Bayley mental and motor.

The KIDS is thus a valid instrument for assessing developmental status in VLBW infants, and may also have clinical advantages by involving the parent.

42 THE EFFECT OF MATERNAL PERCEPTION OF SEVERITY OF ILLNESS IN HER CHILD AND SEPARATION ANXIETY DURING THE FIRST YEAR OF LIFE. Cyrus Dabiri, MD Baystate Medical Center, Springfield, MA.

Sixty mothers of sick neonates (study group) were compared with sixty mothers of term newborn infants. Groups were equivalent for demographic variables such as race, maternal education and socio-economic status. Mothers were interviewed prior to their discharge and one year later. Perception of neonate's illness was scored by mothers as mild, moderate, severe, and severe with possible death. Anxiety levels were scored based on duration of time it required the mother to separate from her infant and were defined as none (0-2 mths), as mild (2-6 mths), and moderate (6-12-mths). Data was analyzed comparing the two groups as to separation anxiety (Table 1); maternal perception of illness was related to anxiety separation for the study group (Table 2).

Table 1

| Sep. Anx. | Study | Control | Sig. |
|-----------|-------|---------|------------------------------------|
| None | 23 | 48 | χ ² = 21.56 p < .005 |
| Mild/Mod | 37 | 12 | |

Table 2

| Mat.Percep. | Sep. Anxiety | | Sig. |
|-----------------------|--------------|----------|----------------------------------|
| | None | Mild/Mod | |
| Mild/Mod. | 13 | 9 | χ ² = 6.33 p < .02 |
| Sev. with Poss. Death | 10 | 28 | |

These data suggest that maternal perception of illness has a significant impact on her ability to separate from her infant during the first year of life, emphasizing the need for ongoing parental counseling.