

● **775** PROBABLE EFFICACY OF HIGH DOSE SALICYLATE IN REDUCING CORONARY INVOLVEMENT IN KAWASAKI DISEASE.

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Although acetylsalicylic acid (ASA) is the most widely used drug in Kawasaki disease because of its anti-inflammatory and antiplatelet effect, a previous study failed to show efficacy of ASA 30 mg/kg/day in reducing coronary involvement in this disease. We have recently documented erratic and often reduced absorption of ASA in Kawasaki disease such that 30 mg/kg/day could not be assumed to yield therapeutic concentrations. In the present study the efficacy of high dose salicylates in reducing the coronary features of Kawasaki disease was assessed in 36 children who received ASA 80-180 mg/kg/day, and 18 who did not receive high dose salicylates during the febrile phase of the disease and whose fever was controlled mainly with acetaminophen. The two groups were comparable with respect to age and body weight. In the ASA-treated group the dose was adjusted to achieve a concentration  $\geq 20$  mg/dl. There were significantly more cases of coronary disease in the non-treated group (50%) than in the salicylate-treated group (16.6%) ( $P=0.014$ ). Due to impaired absorption of ASA during the febrile phase of the disease salicylate serum concentrations achieved per given dose were on average 50% those observed during the non-febrile phase. Despite the difficulty in achieving therapeutic concentrations of salicylate during the febrile phase of Kawasaki disease even with doses as high as 100 mg/kg/day, this dose appears to reduce coronary artery involvement.

● **776** NEAR MISS SIDS INFANTS - A CLINICAL AND ELECTROCARDIOGRAPHIC CORRELATION. Ehud Krongrad, College of Physicians & Surgeons of Columbia University, Dept. of Pediatrics, N.Y.C., New York 10032.

Home monitoring of infants with a history of apparent life threatening episode is often used in an attempt to prevent sudden infant death. In the absence of specific tests to identify infants at risk, recommendations for home monitoring are based on parental-clinical observations, and exclusion of other diseases. In spite of the widespread use of monitors little objective data is available to support such parental clinical observations. This study was carried out in order to validate objectively the value of parental clinical observations. 20 of 118 infants considered to be high risk for SIDS were provided with special monitors capable of recording hard copy electrocardiograms (ECGs) with each alarm. The patient population consisted of 14 infants who were seen because of apparent near miss SIDS episodes, 3 because of apneic episodes of prematurity and 3 because they were sibling of SIDS infants. Monitoring ranged from 2 to 49 weeks (mean = 19 weeks). In spite of many reported clinical frightening episodes by parents none of the hard copy ECGs showed a rhythm considered as life threatening. Further, parental-clinical impressions of life threatening episodes were almost always associated with a perfectly normal ECG. Thus, it is concluded that no correlation exists between parental impressions and ECGs showing increased risk to life. Further, the study raises serious doubts regarding previously published data based solely on parental observations as basis for designation to high risk group or indication for therapy.

● **777** THE IMPACT OF WRITTEN INFORMED CONSENT (WIC) ON IMMUNIZATION RATES AND PARENTAL KNOWLEDGE. Pamela A. Lally, Stephen A. Chartrand, Arvind K. Shah, Vipul N. Mankad, (Spon. by Robert C. Boerth), Depts. of Pediatrics and Statistics, Univ. of So. Alabama College of Medicine, Mobile, Al.

Although WIC prior to immunization is recommended by many health authorities, it is not widely accepted by pediatricians. We investigated the impact of WIC on immunization rates and parental knowledge about vaccines in an indigent clinic. Parents of 128 infants eligible to receive the 1st DTP/OPV immunization were prospectively randomized to 1 of 3 groups: (A) parents were given an oral presentation about vaccines/side-effects; (B) parents read the CDC's "Important Information Statements" (IIS); (C) a physician read the IIS to the parents. All parents were encouraged to ask questions. At the end of the visit all parents completed a 13-item test assessing knowledge of the benefits/risks of the vaccines. Immunization rates were (A) 39/39, (B) 48/49, and (C) 40/40. The mean physician times (minutes) required to obtain consent were (A) 1.4, (B) 1.5, and (C) 7.3. Mean scores on the 13-item test were (A) 46%, (B) 60% and (C) 64% ( $p<0.001$  A vs B and A vs C). Five of 7 items that were highly discriminatory between groups pertained to major side-effects of the vaccines. We conclude that, in an indigent population: (1) the use of WIC for immunizations does not significantly reduce immunization rates; (2) parental knowledge of immunizations/side-effects is significantly increased by use of the IIS forms; (3) parents learn the same amount of information if they read the IIS form or have it read to them; (4) physician time requirements are not increased when IIS forms are provided.

● **778** ISOLATED BILIOUS VOMITING IN THE FIRST 72 HRS IN TERM NEONATES. Lilien, L.D., Srinivasan, G., Yeh, T.F., Pyatt, S., and Pildes, R.S. Cook County Hosp., Dept. of Ped., Chicago Med. School and Univ. of Ill., Chicago, Ill.

A prospective study was undertaken to evaluate the significance of isolated bilious vomiting in the first 72 hours after birth. Over a 4-year period, 45 infants (2/1000 live birth) (mean  $\pm$ S.D. B.W. 3.2 $\pm$ 0.4 kg; G.A. 39.7 $\pm$ 1.2 wks) were admitted to NICU because of bilious vomiting without other obvious signs of GI obstruction. The extent of work-up followed a protocol which included serum electrolytes, Ca, plasma glucose, CBC and plain abd. X-ray in all cases, upper or lower GI series and septic workup if indicated.

Of the 45 infants, 9 (20%) required surgical intervention (5 malrotation, 1 jejunal atresia, 1 jejunal stenosis, 1 jejunal duplication cyst, 1 infantile myofibromatosis) and 36 (80%) associated with non-surgical conditions (31 idiopathic, 3 meconium plug; 2 left microcolon). There was no sign. diff. between the surg. and non-surg. cases at time of onset of bilious vomiting and onset of meconium passage. All infants with non-surg. condition resumed feeding by 1 week. Surgical cases had sign. higher ( $p<0.05$ ) incidence of specific findings (4/9) on plain abd. X-ray than the non-surg. cases (1/36). 21/31 with idiopathic bilious vomiting had normal X-ray; 10/31 had non specific dilatation. The validity and predictive values of plain abd. X-ray were: specificity 97%, sensitivity 44%, positive predictive values 80%, negative predictive values 88%. We concluded that: 1) only 20% of infants with isolated bilious vomiting had surgical causes, 2) a positive plain abd. X-ray could predict 80% of surgical cases, a negative finding could not rule out surg. problems.

● **779** WHAT IS A NORMAL BILIRUBIN? NEW STANDARDS FOR PHYSIOLOGIC JAUNDICE. M. Jeffrey Maisels, Kathleen Gifford, Penn St Univ Coll of Med, M.S. Hershey Med Ctr, Dept of Pediatrics, Hershey, PA.

Maximum serum bilirubin (SB) levels and feeding methods were analyzed in 2388 infants (99% white) admitted to our well baby nursery in 1976-1980.

Percentile	Maximum Serum Bilirubin mg/dl	
	Breast fed (n=1286)	Bottle fed (n=1102)
10	2.1	1.6
25	4.3	3.1
50	7.3	5.6
75	9.7	8.0
90	12.5	10.1
95	14.5	11.6
97	15.5	13.0
99	17.0	15.5
Mean $\pm$ SD	7.1 $\pm$ 3.89	5.8 $\pm$ 3.36

The vast majority of breast feeding mothers had 24 hour rooming in and fed their babies on demand. Virtually all infants with SB>13 mg/dl received phototherapy which may have depressed the upper percentiles. The clear differences (for whatever reason) between these populations imply that our standards for non-physiologic jaundice should be modified. SB>13mg/dl might require evaluation in a bottle fed baby whereas SB>15.5mg/dl would be necessary to arouse similar concerns in a breast fed infant. This approach would save money, if nothing else.

† **780** THE "YELLOW BABY SYNDROME" (OR WHY WELL BABIES ARE JAUNDICED). M. Jeffrey Maisels, Gregory Leib, Kathleen Gifford, Charles Antle, Penn St Univ Coll of Med, M.S. Hershey Med Ctr, Dept of Pediatrics and Dept of Statistics, Penn St Univ, Hershey, PA.

We obtained maximum serum bilirubin (SB) levels in 2421 newborns in our well baby nursery. SB was >12.9mg/dl in 147 (6.1%) and these infants were compared with 147 with SB <12.9mg/dl.

Variable	Logistic Regression		Univariate P
	Beta	P	
Percent weight loss	14.55	.002	
Maternal diabetes	1.766	.028	.003
Bruising	.559	.100	.055
Breast feeding (BF)	.386	.154	.000002
Female	-.579	.061	.039
Epidural anesthesia	.528	.089	.145
Smoking mother	-.606	.102	.038
Oxytocin in labor	.412	.254	.023

Method of delivery, apgar scores, transient respiratory distress and gestation showed no significant associations. Discrepancies between univariate and logistic results, particularly with regard to feeding, occur because many factors are closely related and, therefore, confounding. Only 14% of BF mothers smoke vs 42% bottle feeding. Eighty percent of babies with SB >12.9 are BF and 79% of diabetic mothers BF. Excessive weight loss is more common in BF. Nevertheless, the findings suggest a role for caloric deprivation as a contributor to jaundice. Further studies are needed to evaluate more precisely the contribution of these factors to the development of neonatal jaundice.