● **787** MORE ON APGAR SCORE (AS) AND ASPHYXIA (ASPH). Alan D Rothberg, Jennifer Shaw, Heather Fisher. Spon. by M Jeffrey Maisels. Witwatersrand Univ, Johannesburg Hospital, Dept Pediatrics, Johannesburg, South Africa.

We examined the relationship between AS and biochemical asph using 2 observers (obs). Obs 1 was aware of antepartum history, obs 2 exposed to the infant at the time of delivery. Obs changed roles after every 10th delivery. Independent AS's were assigned at 1 and 5 mins. During their 5 minute period of observation, obs predicted outcome as: normal; grade Ia asph (2 of pH <7,20, bicarb <16mmol/l, base deficit >10); grade Ib (Ia + >5 mins to spontaneous respiration); grade II (Ib + clinical signs; seizures, lethargy, etc). Cord blood gas (CBG) was taken at delivery and later compared with AS and predicted outcome. Thirty five term deliveries were studied. Using the above criteria, 10 were Ia asph on subsequent CBG analysis; 3 were Ib; 22 were normal. The correlation coefficient for interobserver AS was r=.97 at 1 and 5 mins, and obs agreed on predicted outcome in 97% of cases. However, obs correctly predicted only 25% of asph and 62% of normals. The obs AS correlated with delivery room staff assessment of need for positive pressure resuscitation (PPR). All obs AS's of <5 at 1 min had PPR vs only 2 of 26 with AS ≥5, however CBG results suggest that PPR was for primary apnea in 55%. We conclude : 1) the previously demonstrated poor correlation between AS and biochemical asph is not improved by an awareness of antenatal events; 2) neither AS nor apparent need for PPR are reliable indicators of asph; 3) strict definition is required in studies reporting long term outcome of asphyxia.

788 NONSPECIFIC VAGINITIS (NSV) IS AN IMPORTANT CAUSE OF VAGINITIS IN CHILDREN. Patricia Samuels, Margaret R. Hammerschlag, Marinella Cummings, Elaine Tolentino, William M. McCormack. (spon. by L. Finberg). SUNY-Downstate Medical Center, Dept. of Pediatrics and Medicine, Brooklyn, N.Y.

In most published studies an etiology has been defined in less than half of cases of vulvovaginitis in prepubertal girls. NSV, a synergistic infection involving Gardnerella vaginalis and anaerobic bacteria, is a common cause of vaginitis in adults, but has not been described in children. We studied 17 girls, age 2-11 yrs. (mean-5.5 yr), who presented because of vulvovaginitis; 5 of these girls were known or suspected of to have been sexually abused. Cultures were examined for bacteria, including Chlamydia trachomatis, viruses, yeasts and Trichomonas vaginalis. In addition, a vaginal wash specimen was also examined. NSV was diagnosed if the wash contained "clue cells" and gave off a fishy odor when 10% KOH was added.

We were able to make a microbial diagnosis in 11/17 (65%) pts:

NSV	4
Candida albicans	3
Neisseria gonorrhoeae	2
Group A Streptococcus	1
Herpes simplex virus	1

3 of 4 girls with NSV were successfully treated with metronidazole with reversion of the vaginal wash to normal.

NSV was the most frequent identifiable cause of vaginitis in these children.

The results of this study also illustrated the value of the vaginal wash specimen for the diagnosis of vaginitis in prepubertal girls.

● **789** CONTRASTS IN CARE OF CHILDHOOD ASTHMA BY PHYSICIANS AND MOTHERS. Janice A. Stalcup, Vincent E. Hutchinson, Margaret C. Heagarty. Department of Pediatrics, Columbia University-Harlem Hospital Center, New York, N.Y.

Differences between parents and physicians in how asthma should be managed may impact on the treatment of acute episodes. Hence, we studied differences between pediatricians' perceptions and parents' reports of home management of childhood asthma. 46 pediatricians from two urban teaching hospitals were asked to estimate the proportion of parents who employed specific management techniques. Appropriateness of management was tested in a random sample of families seeking care for a child with acute asthma (n=148) in an urban emergency room. Pediatricians tended to overestimate the specific medical knowledge possessed by families: pediatricians estimated that 30% of parents could count respiratory rate, whereas only 11% of families possessed this knowledge ($p<.001$); pediatricians estimated that 48% of patients attended an allergy clinic but only 19% actually did ($p<.05$). However, families used "common sense" techniques such as rest and giving liquids 30% more often than pediatricians' estimates ($p<.001$). A larger proportion of families (80%) stated that they understood instructions for home care than was estimated by pediatricians (62%) ($p<.001$), and smaller proportion of families (11%) used non-prescription drugs than physicians estimated (45%) ($p<.05$). We conclude that substantial incongruity exists between families' use of asthma home care techniques and physician perceptions of management by families.

790 PREVALANCE OF SEXUALLY TRANSMITTED ORGANISMS IN SEXUALLY MISUSED CHILDREN. Deborah C. Stewart, Naomi Uchiyama, Carol Floyd, Elaina Peterson, and Luis de la Maza. Univ. of Calif., Irvine-Calif. College of Medicine, Dept. of Pediatrics and Pathology, Orange, CA (spon. by Ira T. Lott).

A study was conducted to examine 108 alleged sexually abused females ages 2-17 for carriage of potentially sexually transmitted pathogens. Vaginal, rectal and throat sites were cultured for Chlamydia trachomatis and Neisseria gonorrhoeae (NG) and throat and vaginal sites were screened for Gardnerella vaginalis and Mycoplasma spp. All cultures were negative for pathogens in 56 children. NG was not isolated from any of the cultures. There were 3 C. trachomatis isolates all from different patients and body sites. Ureaplasma urealyticum was cultured from 30 vaginal and 5 throat cultures. Mycoplasma spp. was found in 16 vaginal and 6 throat cultures. G. vaginalis was isolated from 26 vaginal cultures. The percentage distribution of organisms vs. age group was as follows:

Patients		Percentage of Patients with Organism			
Age in Grp.	No.	G. vaginalis	M. hominis	U. urealyticum	C. trachomatis
3-5	28	10.7	10.7	0	0
6-9	33	18.2	6.0	15.1	0
10-12	18	22.2	16.7	44.4	5.5
13-17	29	44.8	31.0	58.6	6.9

In summary, we found a high prevalence of sexually transmitted pathogens other than NG in alleged sexually abused children. The significance of these organisms in controls is being studied.

791 GROWTH AND DEVELOPMENT OF PEDIATRIC RESEARCH. E. Richard Stiehm, UCLA Department of Pediatrics, Los Angeles, CA.

Pediatric research may be entering a period of failure to thrive. This is despite impressive scientific achievements, significant financial benefits, intriguing unanswered questions and a rewarding life for the pediatric researcher. Many of the difficulties are financial and situational, including small departments and divisions, few pediatric research mentors, impecunious pediatric hospitals and services, ethical constraints on pediatric research and competing responsibilities. Grants to pediatric departments represent about 3% of the total NIH research project support. The two largest federal programs supporting Pediatric Research are the Clinical Research Center (CRC) program (20% of an $82,000,000/year budget) and the National Institutes of Child Health and Human Development (17% of a $123,000,000/year budget). There are 75 CRCs of which 60 admit children; 10 CRCs are in children's hospital and 6 other CRCs have a clear pediatric focus. Pediatric Departments receive 3% of NIH funds; this represents 10% of funds to clinical departments. By contrast medicine departments receive 17% of NIH funds (47% of funds to clinical departments). NIH research support to pediatrics ($82,000,000/year) is centered in a few large departments; 14 pediatric departments receive 363 of the 572 NIH grants (64%). By contrast, 66 of 120 pediatric departments have no (45) or 1 (21) NIH grants. Obstacles are identified and suggestions are offered for future (students and residents), beginning (fellows and assistant professors), established (associate and full professors) and women pediatric researchers.

† **792** COMPARISON OF DATA COLLECTION CAPABILITIES BETWEEN COMPUTER ASSISTED PEDIATRIC CANCER MANAGEMENT AND STANDARD PEDIATRIC CANCER MANAGEMENT. Faye H. Strayer and C. Thomas Kisker. The University of Iowa College of Medicine, University of Iowa Hospitals and Clinics, Department of Pediatrics, Iowa City, Iowa 52242

This three-year study was made of local and university based physician encounter records of 270 visits by 15 randomly selected computer assisted medical management childhood cancer patients and 246 visits by 14 randomly selected standard management patients. Both groups of patients were treated according to the same research protocols. The amount of clinical research data obtained through use of self-coding, self-auditing computer printed encounter records tailored to the patient-care and data collection requirements of specific protocols was compared to the yield obtained through use of a standard generalized partially structured encounter record. The computer assisted medical management encounter forms yielded 4411 (78%) physician responses to 5670 requests for coded toxicity severity information. The standard management encounter forms yielded 1469 (66%) physician responses to 2214 requests for toxicity information. The computer assisted forms requested specific coded lymph node, liver, spleen, and kidney data4050 times and the information was supplied by the physicians3640 (89.9%) of the times requested. The standard management group forms requested the same uncoded data 984 times, the physicians supplied the data 595 (60.4 %) of the times requested. Clearly this computer assisted management system increases the amount of physician supplied clinical data for patients on cancer research treatment protocols.