

668 FOOTPRINTING THE NEWBORN-COST EFFECTIVE? D. A. Clark, J. Thompson, J. Cahill and B. Salisbury. Dept. of Pediatrics, Upstate Medical Ctr. and the Crime Identification Section, The Syracuse Police Department, Syracuse, New York. (Spon. by M. L. Williams).

Footprinting the newborn for identification is a routine procedure in most hospitals and mandatory by law in many states. We examined the quality of the footprints in full term infants in light of the cost.

Twenty pairs of footprints were taken by experienced nursing personnel in each of five hospitals classified as Level III or II for neonatal care. The 100 sets of footprints were then examined by an experienced police dermatoglyphist for the quality of the footprints for identification of the newborn.

Eighty-nine of the pairs of footprints were technically inadequate. The major problems were improper inking (predominantly too much ink) 35, smudging or foot movement 22, and poor detail even with adequate inking 32.

The cost of footprinting in materials and clean-up is approximately 25¢ for each pair of footprints taken. This does not include nursing time. Nationally this represents a cost in excess of \$500,000 per year.

A review of the medical and legal literature failed to disclose a single instance in which the newborn footprints were used in court for identification of an infant. Ours and previous studies suggest that the vast majority of footprints are technically adequate to do so. In an era of cost containment, footprinting newborns, with no control on quality, wastes time and money.

669 APS-SPR ABSTRACT SUBMISSIONS-PLAYERS AND STRATEGIES. Alan Cohen (Spon. by Elias Schwartz). Univ. of Pa. School of Medicine and The Children's Hospital of Philadelphia, Department of Pediatrics, Philadelphia.

Acceptance of abstracts submitted to the APS-SPR recognizes scientific achievement and is therefore highly valued and eagerly sought. As many as 12 abstracts were submitted by a single investigator in 1980. I have examined the characteristics of high output investigators (HOI's) who submitted 5 or more abstracts to the 1980 APS-SPR meeting and have evaluated the potential effects of multiple abstract submission on the selection process. Investigators whose name appeared last on 50% or more of the abstracts were excluded. Forty-five HOI's submitted 276 abstracts (mean 6.1) in contrast with 131 abstracts (mean 2.9) submitted by the same investigators in 1979. Of 276 abstracts, 228 (82%) concerned newborns; HOI's accounted for 39% of abstracts submitted to the neonatology subsection. Nineteen HOI's submitted 5 or more abstracts to a single subsection. Overall acceptance rate for abstracts from HOI's was 15% in comparison with 28% for investigators submitting only 1 abstract ($P < .001$). On the basis of the acceptance rate for single abstracts, one would predict that 81% of 45 HOI's would have one or more abstracts accepted. In actuality, one or more abstracts were accepted from only 64% of HOI's. These studies indicate that HOI's account for more than 20% of abstracts submitted to the APS-SPR and a particularly high proportion of abstracts submitted to the neonatology subsection. The likelihood of acceptance of a single abstract is not increased as a result of its being a member of an HOI's cohort.

670 FLUORINATED TOPICAL AND INTRALESIONAL CORTICOSTEROIDS HAVE SERIOUS SYSTEMIC CONSEQUENCES IN CHILDREN J. Curtis, E. Cormode, B. Laski, J. Toole, The Hospital for Sick Children, Department of Paediatrics, Toronto, Canada and Soldiers Memorial Hospital, Orillia, Ontario, Canada

Few reports of the adverse systemic effects resulting from topical and intralesional corticosteroid therapy have been documented. Four children (age 1.2-14.8 yrs) were treated with topical (2 cases) or intralesional (2 cases) fluorinated corticosteroids because of psoriasis, alopecia, a third degree burn with scarring and a diaper rash, for periods of 1-7 months. Three patients had signs suggestive of Cushing's syndrome within 4 months of beginning therapy and showed suppression of the hypothalamic-pituitary-adrenal axis. Withdrawal of the steroid resulted in disappearance of symptoms and signs, and return to normal of endocrine function. The fourth patient presented with failure to thrive and developed severe hypotension during a febrile illness. He responded to steroid withdrawal with a marked catch-up in weight and linear growth. Patients treated with fluorinated topical or intralesional corticosteroids may be put at serious risk of adrenal insufficiency and compromise their normal response to stress.

670A REFERENCES TO PARENTS OF CRITICALLY ILL CHILDREN. Joel E. Frader and Charles L. Bosk. (Spon. by David Cornfield) University of Pennsylvania, Depts. of Pediatrics and

Sociology and Children's Hospital of Philadelphia, Philadelphia. We analyzed verbatim transcriptions of audiotaped rounds in a large pediatric intensive care unit (PICU) to determine how physicians refer to families of critically ill children. In almost 4 hours of rounds recorded on 3 days in 1 week, the doctors mentioned the families of 11 of the 25 different patients discussed. There were 19 discreet references to patients or an average of 1 reference every 12½ minutes. Nine references were made during the formal presentation of the patients' medical histories. Three references to parents involved discharge of chronically ill children. The 7 remaining references were about the families of 3 children with grim prognoses.

Discussion at rounds has purposes beyond daily review of data and the opportunity to make diagnostic and therapeutic plans in concert. At rounds, physicians indicate, explicitly or otherwise, what problems in patient care are worthy of regular attention. Verbal references to parents can thus be regarded as a crude indicator of the degree to which physicians include families in the process of caring for the children. The parental references which occurred in presentations and discharge plans had a ceremonial character. Other references to families were infrequent and only occurred when the PICU physicians believed medical measures were no longer efficacious. We conclude that during rounds residents and fellows do not learn to consider family matters in the systematic way they learn technical concerns.

670B MICROCOMPUTER SIMULATION OF MECHANICAL VENTILATION IN A SICK NEWBORN, David K. Fry and David L. Bolam (Sponsored by Robert M. Nelson), University of Nebraska Medical Center, University Hospital, Department of Pediatrics, Omaha, Nebraska.

Mechanical ventilation in caring for sick newborns is an important element of pediatric resident and medical student training. Practical learning is now accomplished by actual patient care in the newborn intensive care unit. The purpose of this program is to provide an interactive, hands on learning experience for pediatric house staff and students.

A BASIC language computer program was developed utilizing the alveolar-air equation and reported data on oxygen consumption, airway resistance and lung compliance to calculate oxygen and carbon dioxide tensions. Utilizing these calculations, the student is presented with a hypothetical patient and is required to enter appropriate orders to adequately ventilate the child. Various other metabolic parameters, such as hematocrit, blood pressure and bicarbonate level must also be watched for their effects on the newborn's status.

The program has been extensively tested and has been found to give a relatively accurate simulation of the sick newborn on a mechanical ventilator. One group of students was given an objective written test before and after spending time with the computer. With no other instruction than that given by the program, their scores went from 60% (+7) to 72.5 (+8.7). This improvement is significant at a 95% confidence level.

670C CHOOSING A SENIOR ELECTIVE PROGRAM FOR A CAREER IN PEDIATRICS. Floy Helwig (spon. by H.L. Nadler) Northwestern Univ. Med. School

An elective curriculum for the fourth medical school year is common today. For students who have made a career decision, the purpose is to prepare for the residency program, develop particular skills, or enhance their career choice. The role of personality, learning styles, and faculty models has been studied, but the effectiveness of an advisory program has not. Pediatric electives completed by NUMS students were analyzed for the three years 1978-1981 to determine the courses selected, and the impact of our advisory program. 48 students took 92 pediatric clerkships. We counselled against "mini-residencies" advising instead broader preparation in related areas of Pediatrics. In 1978, 9 students took 3 or more clerkships; 2 in 1979, and 1 in 1980. The pediatric house staff were surveyed to learn their suggestions for senior year electives; 40% responded. PL-1 preferred Card., Infec. Dis.; PL-2, Neuro., Derm., Child Dev.; PL-3, Allergy, Derm., Ambulatory, Child Dev., Medicine, ENT, & Eye rotations. Suggestions appeared to reflect the needs of their training year. No one recommended research activities. Faculty advising was successful in broadening student clerkship choices. Residents predominantly advised selecting clerkships to prepare for the residency rather than complementing career decisions.