

† 822 TIMING OF RE-EVALUATION FOR INITIAL FOLLOW-UP VISIT (FUV) FOR ACUTE OTITIS MEDIA WITH EFFUSION (AOME): A RANDOMIZED COMPARATIVE STUDY OF 10 DAYS vs 30 DAYS. Richard H. Schwartz, Wm. J. Rodriguez and Kenneth M. Grundfast. Chil Hosp Nat Med Ctr/George Wash Univ Sch of Med, Washington DC. FUV 10-14 days (d) after treatment (Rx) for AOME is customary to assess medical Rx. 180 children with AOME were randomized to either Group A (GpA, N=91) for 10d FUV, or to Group B (GpB, N=89) for 30d FUV. Evaluation was done by otoscopy and tympanometry on 70 patients (pts) in GpA and 74 in GpB. Parents were told to return before FUV if fever, querulousness or ear tugging supervened. At the scheduled FUV, 19 pts (27%) in GpA and 40 (54%) in GpB had normal examination (ex). Persistent otitis media with effusion (POME) was found in 37 (53%) in GpA and 22 (30%) in GpB. The proportion of those with persistent AOME (AOME^P) between 10-17d and of those with signs and symptoms of recurrent AOME (AOME^R) between 18-30d was similar for both groups. AOME^P was noted in 8/70 (11%) GpA pts vs 7/74 (9%) in GpB; for AOME^R 6/70 (9%) GpA pts vs 5/74 (7%) in GpB. Only 9/15 (60%) instances of AOME^P in both groups (5/8 GpA, 3/7 GpB) were detected at 14d FUV, and only 5/11 (45%) recurrences were picked up at FUV within 2 weeks of end of Rx. At 10d FUV, otitis-prone pts (OP+), history of ≥ 3 AOME had normal ex less frequently than pts not otitis-prone (OP-): OP+, 2/15 (13%) vs OP-, 17/55 (31%) and had AOME^R more often: OP+, 4/15 (27%) vs OP-, 2/55 (4%). At 30d FUV, OP+ pts had normal ex less often: OP+, 3/14 (21%) vs OP-, 37/60 (61%) and had POME more often: OP+ 8/15 (57%) vs OP-, 14/60 (23%). At 10d and 30d FUV, OP+ pts had more abnormal ear ex than OP- pts and needed closer follow-up. For OP- pts, FUV 30d after AOME was sufficient.

823 DIFFERENCES IN PEDIATRIC SUBSPECIALTY TRAINING REQUIREMENTS. Glenn M. Silber, and Fielding B. Stapleton. Dept. Pediatrics, Univ. TN. Ctr. Health Sci., and LeBonheur Children's Medical Center, Memphis, TN.

The special requirements of the Accreditation Council for Graduate Medical Education state that the subspecialty rotations in pediatric training programs should not consume more than 11 months. No guidelines are offered concerning which subspecialties should be required or offered as electives. To examine current residency training practices we polled all pediatric residencies with at least 20 residents. Of 109 programs, 37 (34%) responded. Responses showed that the number of required subspecialty months ranged from 0 (22%) to 10 (3%) with a mean of 2.9 months. Subspecialty rotations most frequently required by pediatric training programs are: development 15 (41%), cardiology 13 (35%), hematology/oncology 13 (35%) and neurology 11 (30%). Pediatric surgery is required by 7 programs (19%), while only 6 (16%) require infectious disease and only 4 programs (11%) require experience in a practitioner's office. In addition to required rotations, elective time available for subspecialty training ranged from 4 to 10 months. Required subspecialty experiences vary widely among graduates of United States training programs. Potential explanations include differences in the perception of what knowledge and expertise are required for entry into practice as well as factors other than educational considerations, such as patient service commitment and faculty influence. Whether these differences in required subspecialty training are beneficial or detrimental requires further investigation.

824 COMPARISON OF AXILLARY AND RECTAL TEMPERATURES (TEMP) TAKEN BY ELECTRONIC PREDICTIVE AND MERCURY THERMOMETERS (THERM) Jean M. Silvestri, Paul H. Perlstein, Children's Hospital, Univ. of Cincinnati

Axillary temp measurements using a mercury therm have been documented to correlate with rectal temps if 5 min is spent taking the axillary measurement. In a nursery this is a time consuming activity. Some electronic therms have predictive circuitry that extrapolates final temps from an initial temp rise thus providing an appealing alternative method for axillary temps because it would take only 1 instead of 5 min nursing time to measure. To test of this technique 95 paired measurements of axillary temps were made in 17 full term infants ages 1-8 d. Correlations between axillary temps transduced using an electronic therm (IVAC 811A) in its rapid predictive mode, and a mercury bulb therm was excellent ($r=0.82$, $p<0.001$) but variability from the line of identity ranged from 0° - 1.2° F and in 10.5% of the 95 comparisons the electronic therm predicted a temp that actually was 0.5° or more (range 0.5° - 1.2° F) different from mercury bulb values. Similar comparisons between predictive electronic and standard mercury therms in transducing rectal temps also showed excellent agreement ($r=0.95$, $p<0.001$) but variability from the line of identity was better, ranging from 0° - 0.4° F, as long as both measurements were made at a rectal insertion depth of 3 cm. Greater variability was seen with insertion depths of 2 and 1 cm. Electronic techniques can therefore speed up the measurement of core rectal temps without much loss in accuracy. In addition, electronic predictive therms are probably inappropriate devices for measuring axillary temps in newborns.

825 CHANGES IN PEDIATRIC ADMISSIONS FROM 1975 - 1982: IMPACT ON HOUSE OFFICER (HO) TRAINING PROGRAMS. Roger E. Spitzer and James A. Stockman III, State University of New York, Upstate Medical Center, Dept. of Pediatrics, Syracuse, NY.

In the last 10 years, the numbers and types of inpatient pediatric admissions appear to be changing. In an effort to document these differences and determine their effect on HO training, all admissions to the Pediatric Wards for 1975 (n = 2246) and 1982 (n = 2327) were analyzed. Admissions declined at least 2 fold (2x) for the following disorders: mastoiditis (>10x), nephritis (12x), hemophilia (9x), phimosis (8.5x), diabetes M. (5x), esotropia (3.8x), tonsillitis (3.2x), bronchiolitis (3.2x), undescended testes (3x) and hernia (2x). In most cases, these decreases can be accounted for by more efficient outpatient medical/surgical management. Further, the absolute numbers of patients admitted with these disorders may now be below acceptable limits for adequate HO experience; i.e., only 6 patients with diabetes admitted in 1982. By contrast, admissions increased at least 2x for patients with possible sepsis (14x), gastroesophageal reflux (>12x), possible appendicitis (6x), hypospadias (4x), subglottic stenosis (4x), ingestions (3.3x), neutropenia (2.6x) and scoliosis (2.2x). These are accounted for by enhanced awareness of potentially dangerous disorders, better techniques of treatment, and changing faculty interests. These data suggest that the changes in inpatient experiences may limit HO learning in many areas and force reorganization of training programs with a greater emphasis on the ambulatory setting.

826 PREDICTING SEVERITY OF HEAD INJURY BASED ON REASONS FOR HOSPITAL ADMISSION. Richard H. Strauss (Spon. by Frank A. Oski). Dept. of Pediatrics, State Univ. of New York, Upstate Medical Center, Syracuse, New York.

Most children hospitalized for head injury are admitted for assessment of neurologic status and for monitoring the development of complications. This retrospective study of 155 head injury pts. (2 mos. to 16 yrs.) hospitalized during 14 mos. determines predictive values of common admission criteria following head injury for the severity of head injury based on skull radiographs and head CT scans. Twenty seven pts. had severe head injury: 13 compound/depressed skull fracture, 6 epidural hematoma, 4 brain contusion, 2 cerebral edema, 1 subdural hematoma, 1 brain ischemia; 128 had minor head injury: 46 concussion, 35 minor trauma, 27 linear skull fracture (LSF), and 20 basilar skull fracture. Positive predictive values for severe head injury were: deep scalp laceration/large scalp swelling (75%); loss of consciousness (LOC) ≥ 5 min. (50%); focal neurologic deficit (42%); seizures (28%); altered consciousness (28%); severe headache (21%); any LOC (21%); LSF (18%); vomiting ≥ 5 times (12%); scalp swelling/abrasion (10%); retrograde amnesia (5%); anterograde amnesia (4%). Negative predictive values for severe head injury ranged from 97% for LSF to 75% for anterograde amnesia and scalp swelling/abrasion. Thus, certain "admission criteria" in head injury pts. are predictive of the severity of head injury: the more obvious the presenting abnormality (deep laceration, protracted LOC, focal CNS deficit, seizures), the more likely a severe head injury is present, and that prolonged vomiting, scalp injury, and amnesia are poor predictors of severe head injury.

827 LACK OF VALUE OF SERUM SODIUM DETERMINATION IN THE INITIAL EVALUATION OF THE HOSPITALIZED HEAD INJURED PATIENT. Richard H. Strauss (Spon. by Frank A. Oski). State Univ. of N.Y., Upstate Medical Center, Syracuse, N.Y.

Cerebral edema following head injury may result from water retention secondary to inappropriate secretion of antidiuretic hormone. Most children hospitalized because of head injury are admitted to assess neurologic status and to watch for the development of complications, namely intracranial hemorrhage and cerebral edema. Charts were reviewed on all 155 pediatric pts. (2 mos to 16 yrs) admitted to the Medical Center from 7/1/82 to 9/18/83 under the diagnostic category head injury, to determine the value of the serum sodium (Na) assay as an early marker for inappropriate water retention. Serum Na was measured in 106 pts. upon hospital admission as part of a 6 test chemistry assay. Three pts. had serum Na of 134 mEq/liter (1 with epidural hematoma, 1 with brain contusion, 1 with linear skull fracture), and 2 pts. had serum Na of 133 mEq/liter (1 with epidural hematoma, 1 with minor head trauma). There were 101 pts. with normal serum Na (135-145 mEq/liter): 36 concussions; 21 minor head traumas; 14 basilar linear skull fractures; 14 linear skull fractures; 11 depressed skull fractures; 3 epidural hematomas; 1 subdural hematoma; 1 brain contusion; and 1 cerebral edema. None of the 106 pts. developed water retention with subsequent hyponatremia, nor did any have abnormalities in the other 5 chemistry tests. These data demonstrate that very early measurement of serum Na in children hospitalized following head injury is unnecessary. It is more prudent and more cost effective to monitor such pts. for clinical signs of inappropriate water retention.