403 EVOLUTION OF GROUP B STREPTOCOCCAL COLONIZATION IN ASYMPTOMATIC INFANTS. William T. Speck, Richard A. Polin, John M. Driscoll and Herbert S. Rosenkranz, Col. of Physicians and Surgeons, Columbia University, Babies Hosp., Department of Pediatrics, New York, New York 10032.

Numerous procedures have been recommended to control group B streptococcal colonization in asymptomatic infants. None has proven entirely satisfactory. The purpose of the present report is to describe the evolution of group B streptococcal colonization in our neonatal population during the first six weeks of life. Thirteen percent of newborn infants in our study population were colonized by day 03 of life. This overall colonization rate was maintained for two weeks and then decreased to 5% by the sixth week of life. Of infants colonized on day 03, 41% and 9% were colonized on day 14 and 42, respectively. Seventy percent of babies colonized on day 14 acquired this microorganism following hospital discharge. These findings which demonstrate that a significant number of children are colonized with group B streptococci following hospital discharge are new and may explain (a) the failure of routine nursery antibiotic prophylaxis to prevent subsequent neonatal disease and (b) the recurrence of group B streptococcal infection in treated infants.

404 CHILDREN'S SLEEPWEAR CONTROVERSY: DATA FROM A BURN UNIT, Kent Stahl, Elizabeth McLoughlin, John D. Crawford, Harvard Medical School, Shriners Burns Institute, Department of Pediatrics, Boston.

Recent publicity about the possible carcinogenicity of "TRIS," used in some flame-resistant children's sleepwear, questions the value of the July, 1973, federal regulations regarding the flammability of children's sleepwear, sizes 0-6x. In a 3-1/2 year period (Jan.'70-June'73), 29 children under 7 years of age were treated at the SBI for injuries sustained by the ignition of their sleepwear in ways other than in house fires; during a later period of identical length (July'73-Dec.'76), 11 children were treated for injuries sustained in this manner. (Total acute admissions, earlier period: 309; later period: 317.) Most accidents involved momentary contact with an ignition source: stoves (18), matches/cigarette lighters (15), candles (3), heaters (2), other (2). The behavior of children in these situations was contrary to those which would minimize harm. Most children ran, the result being flame spread and more extensive burns. Children's sleepwear, sizes 7-14, has been regulated in Massachusetts since Dec.'73. From 1970-1973, there were 11 non-house fire sleepwear admissions of children, ages 7-14; from 1974-1976, there were 5. The decline in such sleepwear admissions for all ages is marked: 1974=10 cases; 1975=3 cases; 1976=1 case. Of these cases, only one (1976) involved flame-resistant pajamas; that patient received a comparatively small burn. Further, three children who received their burns in night-time house fires demonstrated the considerable protective characteristics of flame-resistant sleepwear.

405 PEDIATRICIAN'S INVOLVEMENT IN ADULT CARE IN CENTRALIZED TREATMENT PROGRAMS. Hanna Strawczynski, M.D. and George E. Rivard, M.D., Montreal Children's Hospital and Hôpital Ste. Justine, (Spon. by Keith N. Drummond, M.D.).

As a result of advances in diagnosis and treatment, patients with some chronic illnesses starting in childhood are now more numerous. Due to the complexity of their management, the practitioner may be unable to provide adequate technical and supportive care. Special programs in different pediatric hospitals within the same region result in costly duplication of effort and services. Facilities are inadequate for patients who reach adulthood and increasing numbers receive care in pediatric hospitals.

Regional centers providing care for both adults and children offer the expertise of a multidisciplinary group. Centralization should increase efficiency and reduce costs. Based in a pediatric hospital such a program can be supervised and coordinated by a pediatrician, provided there is liaison with a general hospital for inpatient care of the adults. Our pediatric program for hemophiliacs was expanded into a regional center one year ago. It grouped most of the city's 170 patients (40 adults). Care is offered by the basic team of pediatrician, nurse, physiotherapist and social worker, backed by a group of consultants from pediatric and general hospitals. As a result, there has been a dramatic decrease in hospitalization rate of the adults and a marked improvement in their employment record. This model of treatment center combining pediatric and adult patients could also be applied to many other chronic diseases, e.g. cystic fibrosis, thalassemia major, minimal lesion nephrotic syndrome.

406 ANTHROPOMETRIC ASSESSMENT OF NEONATES USING MULTIPLE SKIN FOLD MEASUREMENTS. John N. Udall*, Yvonne Vaucher*, Philip D. Walson*, and Grant Morrow III, Dept. of Pediatrics, University of Arizona Medical Center.

Skin fold thickness is used to assess the amount of total body fat in children. The sum of skin fold thickness measurements at 8 sites (SSFT) was obtained in 72 infants within 72 hours of birth. Gestational age (GA), ranging from 30 to 42 weeks, was determined from the mother's last menstrual period and by Dubowitz scores. Infants were included in the study only if the two methods agreed within one week of each other. Patients were divided into SGA, AGA and LGA categories. SSFT increased linearly ($r=+.93$) from 30 to 42 wks. gestation in 52 AGA infants:

	30-33	34-35	36-37	38-39	40-42
n	4	8	8	14	18
$\bar{x}$	13.9	17.4	20.4	28.1	26.1
$\pm$ SEM	0.5	0.5	1.4	1.1	1.0

SSFT in six out of seven SGA infants were below the range of SSFT for AGA infants of the same gestational age. SSFT in 13 term LGA infants (GA=38-42 weeks) fell into two groups. A clinically non-obese LGA group (8 of 13) showed SSFT overlap with their large AGA counterparts and were distinguished only by weight. The second LGA group (5 of 13) appeared clinically obese. The $\bar{x} \pm$ SEM of SSFT's of the second group (48.7 $\pm$ 1.1mm) was significantly ($p<.001$) higher than for the first LGA group (33.0 $\pm$ 1.2mm). SSFT can be used to separate LGA infants into two categories, one obese and one non-obese.

407 NEONATAL OBESITY. John N. Udall*, Yvonne Vaucher*, Philip D. Walson*, Harlan Giles*, and Grant Morrow III, Dept. of Pediatrics and Obstetrics-Gynecology, University of Arizona Medical Center, Tucson, Arizona.

Anthropometric measurements of mid-upper arm circumference and the sum of skin fold thicknesses at 8 sites (SSFT) were obtained in 49 term infants [gestational age (GA) 38-42 wks] within 72 hrs of birth. There were 4 SGA, 32 AGA and 13 LGA infants. Infants of diabetic mothers were excluded. 5/13 LGA infants had SSFT's >4 standard deviations ($\bar{X}=48.7$ mm, range 44.8 to 51.0mm) above the mean for AGA infants ($\bar{X}=27.0$ mm, S.D. $\pm$ 4.2mm). This group of 5 was classified as obese. The other 8/13 had SSFT's ($\bar{X}=33.0$ mm, range 26.4 to 37.5mm) <3 S.D. above the AGA mean and were classified non-obese. Maternal weight at term (MWT), maternal weight gain (MWG), and each infant's cross-sectional mid-arm muscle area (MA), fat area (FA) and the FA/MA were computed. There was no significant difference between obese and non-obese groups for MA ($p>.05$) or MWG ($p>.1$). Birthweight (BW), FA, FA/MA and MWT were significantly different in the two groups.

LGA Group	BW(gms)	MWT(lbs)	FA (cm ²)	FA/MA
Obese ($\bar{X} \pm$ SEM)	4365 $\pm$ 95	222 $\pm$ 27	3.36 $\pm$.30	.35 $\pm$.02
Non-Obese ($\bar{X} \pm$ SEM)	3897 $\pm$ 53	163 $\pm$ 7	2.02 $\pm$.13	.25 $\pm$.01
p Value	$<.001$	$<.02$	$<.001$	$<.001$

These data indicate (1) a sub-group of LGA infants can be defined as obese, (2) increased weight in larger LGA infants is due primarily to increased fat, (3) obesity in LGA infants correlates more closely with MWT than MWG.

408 ETIOLOGY OF SEPSIS IN A PEDIATRIC ONCOLOGY CLINIC. Leonard B. Weiner and Judith B. Allen (Spon. by Frank A. Oski). SUNY, Upstate Medical Center, Dept. of Pediatrics, Syracuse, N.Y.

In a review of pediatric oncology records from 1972-1976, 27 patients (pts.) with 42 distinct episodes of sepsis (S) were identified (23 leukemia-lymphoma patients (LLP) with 31 episodes, 2 tumor (T) patients with 5 episodes and 2 aplastic anemia (AA) pts. with 6 episodes). Gram negative (GN) organisms (excluding Hemophilus sp.) accounted for 18 episodes, 17 in neutropenic (NP) (<500 granulocytes) pts.: 11 E. coli, 2 P. aeruginosa, 3 Klebsiella-Enterobacter sp. and 2 Bacteroides sp. Four NP LLP with E. coli S. survived. Three pts. had H. influenzae type B and survived; all were in relapse or had disseminated disease but were not NP. Gram positive organisms accounted for 19 episodes: 2 S. viridans with 2 survivors, 5 S. aureus (SA) (all NP) with 4 survivors and 12 S. pneumoniae (P) with 12 survivors. Granulocyte infusions did not appear to influence survival. LLP in relapse and T pts. with disseminated disease had a greater incidence of GN or SA S. E. coli S. in these pts. had the highest mortality (6/11). S. pneumoniae was the only etiologic agent responsible for S. in pts. in remission, all of whom were not NP (7/12) whereas 5/12 episodes of P S occurred in NP pts. in relapse. In this series, P was the most common etiologic agent in S in pediatric oncology pts. and had a uniformly favorable outcome.