391 AGE RELATED CHANGES OF THE PREVALENCE OF OBESITY IN USERS OF THE CHILDREN AND YOUTH NEIGHBORHOOD HEALTH CLINIC.

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Studies in the U.S. show that within the lower socioeconomic stratum black children are leaner than white children of same sex and age, but black women show a higher prevalence of obesity than their white counterparts. Thusly a retrospective study was undertaken to determine the age at which a significant change in the prevalence of obesity does occur in black girls. Charts of 580 girls, who used the Children and Youth Clinic during a three month period in 1976, were reviewed with respect to age, height, weight, medical diagnoses. After exclusion of charts because of insufficient data or, because the individual's disease might affect weight or height, 527 (91%) charts were available for study.

Individuals from 1 through 19 years were divided into age groups of two year intervals. Weight for height was calculated for each individual using NCHS 1976 growth charts. The individuals of an age group were then grouped according to the percent excess weight for height into groups: a) less than 110%, b) 110-120% (overweight) and c) more than 120% (obesity).

While the incidence of overweight did not significantly differ between age groups ($p>0.05$), the incidence of obesity increased significantly ($p<0.001$) between the group 11.1-13.0 and 13.1-15.0 years of age and persisted thereafter at the higher level. The etiology of this striking finding requires further study.

392 NORMAL BLOOD PRESSURE IN OFFSPRING OF PATIENTS WITH ESSENTIAL HYPERTENSION.

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Essential hypertension is diagnosed with increasing frequency in children.Although the cause is unknown,familial and/or hereditary factors are considered important in the pathogenesis,and indeed an aggregation of blood pressure levels has been demonstrated in families.We measured during each of 2 consecutive summers the blood pressure of 94 offspring,47 males and 47 females age 2.5-22 years,from 29 families in which at least one parent was being treated for essential hypertension.The subjects were examined at home.The blood pressure was recorded after 15 minutes rest in the supine position;3 values were obtained in each arm,and the mean of each of the systolic and diastolic pressures was considered as the subject's blood pressure.Hypertension was defined as a systolic and/or diastolic reading above the 95th percentile for age and sex(Pediatrics 56:3,1975).None of the subjects was hypertensive.

Failure to detect hypertension in this selected population which should theoretically be at risk because of hereditary and familial factors leads us to question current estimates of the incidence of essential hypertension in children,reported by some investigators to be as high as 2%.Furthermore values recorded under duress - e.g.,doctor's office or hospital,should be regarded as potentially spurious.

393 NATURAL HISTORY OF PROTEUS MIRABILIS (PM) URINARY TRACT INFECTION (UTI) IN INFANCY AND CHILDHOOD.

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PM is an unusual cause of UTI. A prospective comparison was made of clinical and laboratory findings in PM and E. coli (EC) patients. Twenty five consecutive cases of each representing the first known UTI were followed for an average of 2 1/2 years. Both initial and subsequent episodes were treated for 10-14 days. Mean ages of PM and EC cases were 3 1/3 and 4 1/4 years respectively. The following differences were revealed.

	PM	EC	P value		PM	EC	P value
Males	22	2	<0.001	Pyuria	10	16	<0.05
Fever	5	10	>0.05	Abnormal IVP	1	5	<0.05
Symptomatic	6	19	<0.001	# Recurred	9	12	>0.2
Proteinuria	4	7	>0.1	# of Recurrences	10	30	<0.01
Hematuria	2	6	<0.05	# Recurred after 1 year	4	0	<0.01

PM UTI is therefore characterized by a relative paucity of clinical signs, urinary abnormalities and structural defects of GU tract and occurs predominantly in males. The proportion of PM patients developing recurrent infection within 1 year are somewhat less compared to EC patients. Moreover the number of recurrences per PM patient is significantly less and are extremely rare after one year ($P<0.01$). Antimicrobial therapy of initial UTI in boys (pending culture results) should be planned to include the possibility of Proteus mirabilis.

394 ELECTIVE DELIVERY OF THE "TERM" FETUS - AN OBSTETRICAL HAZARD.

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Of 1,020 consecutive admissions to a regional neonatal center, 38 infants were admitted following elective delivery in which no medical condition of the mother or fetus had necessitated immediate delivery. Twenty infants had problems which were not, primarily, the result of elective delivery, but 18 developed hyaline membrane disease which was clearly related to premature delivery. Fifteen of these 18 infants were delivered by Caesarean section and in none of the mothers had any assessment of fetal maturity or size (other than the menstrual history and physical examination) been attempted. These infants remained in the hospital for an average of 12.7 days at a mean cost of $3456 per patient. One infant died. Elective delivery in the absence of pressing medical indications should not be undertaken without objective assessment of fetal maturity. Failure to utilize available techniques may produce a cost in morbidity and mortality which cannot be defended.

395 BATHROOM SCALDS IN CHILDHOOD

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Bathroom scalds, caused by hot water in bathtubs, sinks and showers are less frequent (48 patients, 26% of all acute scald patients at the SBI), but are significantly more severe than "kitchen scalds." This comparison of severity can be made in terms of extent of burn (29% BSA vs. 15% BSA); depth of burn (50% had some 3° vs. 33% had some 3°); length of hospital stay (44 days vs. 34 days); and mortality (3/48 vs. 1/138). Forty percent of these children were between twelve and twenty-four months old, and contrary to burn patterns overall, the majority were female. The bathroom fixture was identified in 40 cases: bathtub (32), sink (6), shower (2). It is possible to group these accidents into five behavioral categories: a) Momentary Lack of Supervision (17); b) Child Abuse/Neglect (12); c) Sibling Interaction (8); d) Caretaker Misjudgement (6); e) Product/System Failure (5). The low level of public awareness about the severity of such scalds is evident when, in a telephone survey (1976) one half the respondents disagreed with the statement: "Water from a faucet can cause a burn serious enough to hospitalize a person for a month." A public education campaign should include information about water temperature and exposure times which cause severe burns: (111.6°F for 20-25 minutes; 127.4°F for 30 seconds; 140.0°F for 3-5 seconds), proper safe settings for domestic hot water heaters as related to housing, water distribution, use and washing appliances, as well as proper parental precautions for bathroom safety of young children.

396 ASPHYXIA NEONATORUM: A MAJOR CAUSE OF MORTALITY AND MORBIDITY.

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Consecutive liveborn deliveries (19,295) during 1970-72 were reviewed to establish the incidence, risk factors, and mortality rate associated with severe asphyxia. 214 infants (1.1%) were severely asphyxiated; mortality was 48%. A strong inverse correlation existed between both incidence of and mortality for asphyxia, and gestational age (GA) and birth weight (BW), Table. Other predisposing factors were low socioeconomic status, history of fetal wastage, and complications of pregnancy or labor. Asphyxia occurred 4 times more commonly with both breech presentation and with non-elective cesarean section, regardless of GA.

Neurological and intellectual assessments were performed at a mean age of 4.9 yr on 69/77 survivors of yrs 1970-71. Mean IQ was 106; 49 (71%) of the survivors were completely normal. Severe handicapping defects were present in 13/69 (19%) and were equally frequent in term and preterm survivors. 8 had cerebral palsy (CP) with mental retardation (MR), 2 had CP alone, 2 had MR alone, and 1 was deaf.

In this series, asphyxia greatly increased mortality, especially in the mid and high weight groups. The incidence of severe sequelae was high but did not vary with BW or GA.

BW (kg)	%Asphyxiated	Mort. (%) Asph.	Mort. (%) None
<1.0	52	96	76
1.0-1.5	20	70	26
1.5-2.0	10	41	4
2.0-2.5	3	21	1.4
>2.5	0.4	18	0.1