

7 PUBERTAL DEVELOPMENT IN ADOLESCENT FEMALES: A MARKER FOR EARLY SEXUAL DEBUT. Charles E. Irwin, Jr., Mary-Ann B. Shafer, Susan G. Millstein, University of California, San Francisco, Department of Pediatrics.

Puberty is viewed as having a significant impact on the psychosocial development and behavior of adolescent females. To evaluate the association of the timing of puberty and adolescent psychosexual behavior, we investigated the relationship of the following variables: age of menarche, age at sexual debut (first intercourse) and prevalence of endocervical *Chlamydia trachomatis* infection (CT+) in a University teen clinic population. 98 sexually active subjects (Ss) were studied including a complete gynecological examination. Mean age of Ss was 16.8 years (SD=1.8; R=13-21). Race/ethnic distribution was 31.6% white, 36.7% black, 12.2% hispanic, 8.2%asian, and 11.2% other. Mean age of menarche was 12.4 (SD=1.4, R=9-17). Mean age at sexual debut was 14.7 (SD=1.8, R=11-19). Ss had 3.7 mean number of lifetime partners (SD=4.1, R=1-20). Adolescents who had completion of puberty (menarche before 12.9 y.o.) had an earlier onset of sexual activity (Pearson R=.48, p<.001). Endocervical CT+ cultures were associated with females with an earlier sexual debut (CT+ X debut=13.8 years, sd=1.2, CT- X debut=14.9 years, sd=1.9, t=3.35, p=.002). Early sexual debut is associated with earlier menarche and endocervical *Chlamydia trachomatis*. These results suggest that physiologic age may be an important factor in the prediction of adolescent females who are at risk for morbidity associated with sexual activity.

8 GENITAL CHLAMYDIA DETECTION IN INNER-CITY ADOLESCENTS: A COMPARISON OF DIRECT SPECIMEN AND TISSUE CULTURE METHODS. Leslie R. Jaffe, Lorena M. Siqueira, Sharon B. Diamond, Angela Diaz, Neil A. Spielsinger, (Spon. by Kurt Hirschhorn). The Mount Sinai School of Medicine, Mount Sinai Hospital, Depts. of Pediatrics and Obs/Gyn., N.Y.

We compared tissue cell culture isolation with the Microtrak fluorescent antibody direct specimen test for detection of genital *Chlamydia trachomatis* in an inner-city population of sexually active Black and Hispanic adolescents. Cervical specimens for *Chlamydia trachomatis* and *Neisseria gonorrhoeae* were obtained from 95 consecutive females (average age 17.9 years) undergoing a pelvic examination, and urethral specimens from 10 males (average age 18.7 years) with genitourinary complaints. Both tissue cell and direct specimen methods for *Chlamydia* were positive in 24 patients (22 female, 2 male). In 2 patients (1 female, 1 male), only the direct specimen method was positive; and, in 3 subjects (2 female, 1 male), only the tissue culture was positive. In total, 26.3% of females (N=25), and 40.0% of males (N=4) had *Chlamydia*. Contrary to previous reports, Blacks (28.6%) did not have a higher prevalence of endocervical *Chlamydia* than Hispanics (24.1%) (p>.05), nor were oral contraceptive users more likely to be infected with *Chlamydia* (33.3%) than girls using another or no method (19.1%) (p>.05). Sixteen (64%) girls with *Chlamydia* were asymptomatic. *N. gonorrhoeae* was identified in 8 (8.4%) females and 5 (50%) males. Concomitant infection with both organisms was found in 3.8% of subjects (3 females, 1 male). Accurate, convenient, and rapid, the direct specimen test is the method of choice for screening all sexually active adolescents for genital *Chlamydia*.

9 URINARY TRACT INFECTION (UTI) IN ADOLESCENCE; A PROSPECTIVE EVALUATION OF MORPHOLOGY, BACTERIOLOGY AND NATURAL HISTORY. Abdul J. Khan, Sudhakar Kunamneni, Lloyd S. Hershman, Henry A. Schaeffer and Hugh E. Evans. Interfaith Med. Ctr., SUNY/Downstate Med. Ctr., Brooklyn, N.Y.

The incidence, clinical and microbiological characteristics of UTI in adolescents and range of structural malformations are not well described. 560 (163 males, 397 females) infants and children with UTI were reviewed. Initial UTIs encountered between 10-17 years of age were evaluated regarding host factors, microbiology, urinary tract (UT) morphology and follow-up (average 1½ years). Recurrences were classified as frequent (FR) (≥2 episodes in any 3 month period) or infrequent (IR) if <2 (table). Males showed

	#(%)	AVG. AGE	ORGANISMS %					% ABNORMAL	RECURR. RATE %		
			EC	PM	Kleb	Gm+	IVP		Total	FR	IR
Boys	16(10)	12yr.	50	20	0	13	38%	33%	13	6.5	6.5
Girls	62(16)	12yr.	61	2	8	18	18%	13%	42	12	30
P Value	>.05	-	<.05	-	-	<.05	<.05	<.05	<.05	<.05	<.05

slightly lower incidence of initial UTIs (P>.05). *E.coli* (EC) was the most frequent pathogen. *Proteus Mirabilis* (PM) was more common in males (P<.05). In males UT malformation was more common (P<.05) but recurr rate 1/3 that of girls. Recurrences among males were limited to those with abnormal UT but in females were unrelated. We conclude that adolescent males have a higher incidence of malformation but fewer recurrences. Recognition of higher recurrences among adolescent females is important in organizing programs for prevention of UTI and its potentially adverse effect in pregnancy and later life.

10 BIOMEDICAL KNOWLEDGE, CULTURAL VALUES AND CHOICES FOR INFANT FEEDING AMONG ADOLESCENT MOTHERS. Ruth A. Lawrence, Ayala Gabriel, K. Ruben Gabriel, (Spon. by Elizabeth McAnarney) University of Rochester School of Medicine, Strong Memorial Hospital, Department of Pediatrics, Rochester, NY 14642. Abstract

A study to examine the relationships between specific infant feeding choices, demographic factors, cultural beliefs, and biomedical knowledge was conducted. Three hundred thirteen (313) consecutive parturient women, of whom 68 were 18 years old or younger at the time of their first delivery, were interviewed. Of these adolescents, 16 were breastfeeding (24%) as compared to 56% of all women in the sample. Of those who were young, but married, 46% were breastfeeding. Young mothers knew breast milk was best for the infant, but thought bottlefeeding was best for the mother because of the proscriptions and prescriptions required for breastfeeding and the wish to share the feeding with others. The need to work or the desire to return to school was not given as reasons to bottlefeed. The choice between breastfeeding and bottlefeeding is found to be affected by cultural beliefs and values such as young mothers' beliefs about interdependence and reliance on others.

11 ADOLESCENT MOTHERS AND THEIR YOUNG CHILDREN. Elizabeth R. McAnarney, Ruth A. Lawrence, Jennifer Polley, Moira Szilagyi, University of Rochester Medical Center, Department of Pediatrics, Rochester, New York.

It is unclear why the school-aged children of adolescent mothers do less well behaviorally than the children of adult mothers. It has been hypothesized that adolescents may begin to experience mothering problems when their children are approximately one year of age and are becoming independent. We studied the relationship between adolescent maternal age and mother-child interactions of 30 adolescent mothers (x=17.2 yrs.; S.D.=3.4) and their 9-12 month old children in the laboratory. Two ten minute sequences (floor and chair sequences) were videotaped. A trained observer rated the videotapes of the 30 dyads after establishing inter-rater agreement of >0.7 with a second trained observer on a 19 item rating scale. Floor and chair scores were significantly correlated and thus were averaged for each of the 19 items. There were significant negative correlations between maternal age and the following maternal items: ambivalent rejection (-0.6359, p<0.001); insensitivity (-0.4656, p<0.006); inconsistent accessibility (-0.5152, p<0.003); and mild interference (-0.5734, p<0.001). Other significant correlations were: maternal age and minimal social contact of baby with the mother (-0.3167, p<0.05) and neutrality in mother-child interaction (-0.3487, p<0.032). We conclude there is a significant relationship between young maternal age and inconsistent and ambivalent mother-child interactions at 9-12 months in the laboratory.

12 ADOLESCENTS' ASSESSMENTS OF BEHAVIORAL RISK: SEX DIFFERENCES AND MATURATION EFFECTS. Susan G. Millstein, Charles E. Irwin, Jr., University of California, San Francisco, Department of Pediatrics.

Adolescents' perceptions of risk involved in specific behaviors were examined in 224 middle/high school students from 11 to 19 years (mean=14.2 years, SD=1.8). 110 subjects were male and 114 were female. Subjects rated the risk of 11 behaviors on a 6-point scale. The behaviors included those associated with morbidity/mortality (drinking beer/wine=DRINKBW; drinking hard liquor=DRINKH; using drugs=DRUGS; being a passenger in a car when driver has had a few drinks=DRVDRK; or is driving fast=DRVFAST; riding a bike/skateboard recklessly=RECK; having sexual intercourse=SEX). Other behaviors rated were smoking cigarettes (CIG); not seeing a physician in presence of health problem (NOMD); eating poorly (EATBAD); and not exercising (NOEX). In decreasing order of risk, subjects rated the behaviors as follows: DRUGS, DRVDRK, DRINKH, NOMD, CIG, RECK, DRINKBW, DRVFAST, SEX, EATBAD, and NOEX. Risk assessments varied as a function of the adolescents sex, age, and Tanner stage. Behaviors associated with morbidity/mortality were seen as being significantly more risky by females than by males (p<.005); individual behaviors that females rated as more risky were SEX, DRVFAST, EATBAD (p<.001) and RECK (p<.01). Older, more physiologically mature adolescents perceived significantly less risk than did younger adolescents for behaviors associated with morbidity/mortality (p's<.001). Specific behaviors for which older, more mature adolescents perceived less risk were: SEX, CIG, DRINKBW, DRINKH (p's<.001) and DRUGS (p=.001). Physiologic age and sex differences need to be considered in designing intervention programs.