

- †7 THE INFLUENCE OF PSYCHOLOGICAL FACTORS ON ADOLESCENT'S RESPONSE TO ANALGESICS FOR PAIN. Robert H. DuRant, Susan Jay, Rita Jerath, Stacy Fink, Jany A. Jennings, Charles W. Linder (Spon. by Albert W. Pruitt). Medical College of Georgia, Children's Medical Center, Department of Pediatrics, Augusta.

The purpose of this study was to assess the influence of internal health locus of control (IHLC) and anxiety on adolescents' response to a nonsteroidal anti-inflammatory agent (NSAIA) for the treatment of mild to moderate pain. Fifty-four adolescents (ages 16 to 22 years) from two adolescent clinics presenting with mild to moderate pain due to dysmenorrhea, sprain or strain, headache or backache were studied. Following a physical examination and a pretest assessment of IHLC, the Spielberger State Trait Anxiety Inventory (STAI), and pain, subjects were randomly assigned in a double blind fashion to groups receiving placebo (n=16), 100 mg of the NSAIA (n=19) or 200 mg. of the NSAIA (n= 19). Pain was assessed on a 100 mm linear analogue scale at baseline and at 1, 2, 3, and 4 hours. Based on a three-way repeated measure analysis of covariance test, all groups decreased in pain over the four hours ($p < 0.0001$), and females decreased ($p < 0.013$) more than males. Subjects receiving 200 mg. of the NSAIA had lower pain ($p < 0.034$) than placebo only at hour 2. By hour 4, subjects with higher IHLC scores had lower pain ($r = -0.27$, $p < 0.023$). However, this relationship was dependent on the dose of NSAIA 100 mg ($r = -0.60$, $p < 0.003$), 200 mg ($r = -0.36$, $p < 0.062$). Although anxiety was not associated with the level of pain at baseline, the greater the adolescents' pain at hour 4, the more anxiety they expressed on their post-treatment STAI ($r = -0.34$, $p < 0.005$).

- 8 CONTRACEPTIVE RISK-TAKING BEHAVIOR BY SEXUALLY ACTIVE ADOLESCENT FEMALES. Robert H. DuRant, Joe M. Sanders, Susan Jay, Charles W. Linder, (spon. by Albert W. Pruitt). Medical College of Georgia, Children's Medical Center, Department of Pediatrics, Augusta and Arkansas Children's Hospital, Little Rock.

Despite the availability of effective contraceptives, adolescent pregnancy remains a formidable health issue. Previous studies of adolescent contraceptive risk-taking have been atheoretical in nature and have been analyzed in univariate and bivariate modes. The purpose of this study was to test a multivariate theoretical model which predicts (1) the decision to use contraceptives and (2) the choice of a specific method. The model consists of: premarital sexual standards and experiences → frequency of coitus → perceived probability of pregnancy → cognitive assessment of pregnancy → contraceptive activity. The model was tested using a recent national (U.S.A.) representative sample of nonmarried, sexually active females ages 15 to 20 years (n=1010) and was analyzed with three multiple regression analysis models. The number of years of sexual activity and the frequency of attendance at religious services were associated with coital frequency ($R = 0.17$, $p < 0.0001$). Coital frequency, followed by post menarchial age and years dating also had a direct effect on contraceptive use ($R = 0.23$, $p < 0.0001$). Attitude toward pregnancy, previous professional birth control advice, compliance with first contraceptive method, coital frequency and the source of their first family planning services were highly associated with contraceptive use ($r = 0.84$, $p < 0.0001$). These data support the model and provide insight into the decision process used by adolescents to take contraceptive risks.

- †9 PREMENSTRUAL SYMPTOMS IN ADOLESCENTS. Martin Fisher, Katherine Trieller, Barbara Napolitano (Spon. by Stanford B. Friedman). Cornell Univ. Med. Coll., North Shore Univ. Hosp., Depts. of Pediatrics and Research, Manhasset, NY

We administered the Premenstrual Assessment Form (PAF), a standardized self-report questionnaire, to 208 females at a suburban Adolescent Health Service to determine whether adolescents experience the premenstrual changes in mood, behavior, and physical symptoms reported in adults. The PAF consists of 95 items on a 6-point rating scale. It is scored by computer to establish 18 diagnostic categories and an index of severity of emotional and physical symptoms. Subjects were 12-21 yrs of age (mean 17.6 ± 1.7), 89% white, 59% in high school and 28% in college. Premenstrual symptoms, reported by 96% of subjects, were most often categorized into the following symptom complexes: general discomfort (74% of subjects), impaired social functioning (50%), water retention (50%), major depressive (47%), impulsive (38%), fatigue (32%), and minor depressive (18%). The prevalence of these complexes matches almost exactly that reported in published series of adults (with the exception of impaired social functioning, reported in only 17% of adults). The severity of emotional and physical symptoms are also within the same range as those reported in adults. Symptoms did not vary significantly among adolescent subjects based on age, race, school status, or parental education. Fewer ($p < 0.05$) premenstrual symptoms were reported by the 23% of subjects on the birth control pill and by the 38% with mild or no cramps during their menses.

Those symptoms said to constitute the "Premenstrual Syndrome" occur as frequently in adolescents as in adults, with a higher incidence of social impairment. Physical and emotional complaints in adolescents must be evaluated, both by the clinician and researcher, in the context of these findings.

- 10 DILEMMA OF GARDNERELLA VAGINITIS IN ADOLESCENTS. Sherah B. Fitzpatrick, G.P. Shragg, Marianne E. Felice Childrens Hosp. National Med. Ctr. Pulm. Med. Dept., Washington, D.C. & UCSD Med. Ctr. Pediatric Dept. San Diego, CA (Sponsored by Robert Parrott)

Although 50% of adult women are vaginally colonized with Gardnerella vaginitis (GV), its association in adults as well as teens with clinical infection has been unclear and confusing. We conducted a prospective 1 year study to determine the prevalence of GV vaginitis and associated risk factors in teens attending an adolescent medicine clinic. At their first visit during the study, 180 consecutive patients (79 Caucasians, 55 Blacks and 46 Mexican Americans), requiring a pelvic exam were evaluated for GV. Mean age was 16.9 ± 2 years (range 12-21). Of those, 83% were sexually active (length sexually active $\bar{X} = 1.9$ yrs) and 27% were pregnant. Diagnostic criteria for GV vaginitis in conjunction with ⊕ culture included: thin, homogenous vaginal discharge; ⊕ KOH odor test and ⊕ clue cells. Diagnostic studies included history, physical exam, vaginal smear and cultures and other tests as indicated. Overall, GV was recovered in 23% of cultures; GV occurred solely in 71%, with Candida in 24%, with trichomonas in 5%. Among GV patients, 85% had ⊕ clue cells, 76% had ⊕ KOH test, 78% had discharge; 54% were symptomatic. STD and 1 other vaginal infection correlated with GV ($p < 0.01$). Neither age, race, sexual activity, duration of OCP use nor pregnancy were risk factors. Our data in teens support observations reported in adults and reinforces correlating culture results with ⊕ clue cells, ⊕ KOH and physical manifestations when deciding to treat.

- 11 ADOLESCENT DEPRESSION: NEUROENDOCRINOLOGIC FEATURES. Michael B. Foster, Kenneth N. Schikler, Barbara A. Fitzgerald and G. Randolph Schrodt, University of Louisville School of Medicine, Kosair Children's Hospital, Departments of Pediatrics and Psychiatry, Louisville, Kentucky. (Spon. by Billy F. Andrews)

This study was undertaken to determine whether a relationship might be found between the existence of depressive illness in adolescents and alterations in the functional status of the hypothalamic-pituitary-thyroid axis, and was part of a larger study intended to describe diagnostic, biologic, and cognitive features of adolescent depression. Eighteen inpatients were included after being diagnosed with severe depression as determined by two interviewers using two depression inventories and applying DSM III criteria. Thirteen females and five males ranged in age from 14-19 years (mean 15.6 yrs). Each patient was subjected to an overnight dexamethasone suppression test (DST) using a dose of 1 mg and TRH infusion using a dose of 500 mcg. Abnormal responses were defined as any one of the three cortisol levels measured > 5 mcg/dl or a rise in TSH < 7 mIU/ml. Seven patients showed abnormal responses; two blunted TSH responses (both males), two non-suppression on DST (both females) and both tests abnormal in two males and one female. Baseline TSHs did not differ in the two groups. Clinical features associated with depression did not distinguish between the two groups. In this series, blunted TRH response occurred with frequency equal to non-suppression on the DST.

- 12 TEENAGE FATHERS AND FATHERS OF BABIES BORN TO TEENAGERS. Janet B. Hardy and Anne K. Duggan

Birth certificates for Baltimore residents in 1983 provided data for fathers and mothers, 12% of all babies had 2 teen parents, 14% had a teen mother only and 1.7% had a teen father and older mother, 72% had parents aged 20 or above. Teen fathers and those of babies of teen mothers were disadvantaged educationally and financially and few were married as compared with older parents.

Interviews with a random sample of adolescent mothers (<18 yrs., n=389) provided the following data for black and white fathers, respectively: father and mother knew each other for >12 mos. prior to pregnancy, 85 vs 78%; father wanted the pregnancy, 52 vs 61%; mother desired the birth, 12 vs 40%; 15-18 mos. after birth, father was married and living with mother, 2 vs 24%; father was working, 47 vs 75%; contributed financially to child's support, 58 vs 71%; had frequent contact with child, 62 vs 77%; assisted in child care, 69 vs 73% and in decisions regarding child, 32 vs 41%. Father's contribution viewed as too little by mother, 61 vs 32%. Father and mother had neither married nor lived together, 86 vs 43% and father had no contact with child in 13% of blacks and 12% of whites. Thus, in most adolescent childbirths, the father has a continuing role during the child's early life.