

## Abstract 1183

## INSECURE ATTACHMENT IS ASSOCIATED WITH PERCEIVED STRESS, DEPRESSION AND FATIGUE IN SUBJECTS WITH CHRONIC GASTROINTESTINAL DISEASE

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Adult attachment style may be a useful construct by which to understand how developmental factors contribute to disease course in some illnesses. Although insecure attachment is associated with stress response and depression in non-ill samples, these relationships are not confirmed in the physically ill. In a sample of 72 outpatients with chronic gastrointestinal (GI) illnesses (49 ulcerative colitis (UC), 17 hepatitis C, 4 Crohn's disease, 2 other) anxious and dismissing attachment insecurity, depression, chronic perceived stress, state anxiety, fatigue and illness intrusiveness were measured using self report instruments. In UC, disease activity was measured endoscopically. According to Bartholomew's classification method, subjects were assigned to 4 categories of attachment style, based on the presence/absence of high values on the 2 dimensions of anxious attachment (AA) and dismissing attachment (DA). The prevalence of categorical attachment types was: secure (not AA/not DA) 43 (59.7%), preoccupied (AA/ not DA) 7 (9.7%), dismissing (DA/not AA) 12 (16.7%), and fearful (AA+DA) 10 (13.9%). DA subjects compared to not DA report higher levels of depression (DA mean=23.2 vs not DA mean=12.6,  $p = .002$ ), chronic perceived stress (81.4 vs 65.3,  $P < .001$ ), fatigue (3.5 vs 0.9,  $P = .004$ ), and state anxiety (46.3 vs. 38.0,  $p = .01$ ). Similar but smaller differences are found for AA vs. not AA. Illness intrusiveness did not differ between attachment types. In UC, disease activity was higher in DA subjects (4.6 vs 2.2,  $p = .05$ ). This study confirms that among GI outpatients, insecure attachment is associated with higher levels of depression, acute and chronic perceived stress, and fatigue. The cross-sectional design cannot determine the direction of causality in the relationship of disease activity and insecure attachment in UC. As has been found in several other studies of attachment and physical illness, dismissing attachment appears to be more strongly related to illness than anxious attachment.

## Abstract 1578

## DYADIC COPING PATTERNS IN ADOLESCENTS WITH TYPE 1 DIABETES AND THEIR MOTHERS

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Relatively little attention has focused on the influence of parental coping styles on adolescent's adjustment to illness. The effect of parental coping on children may be especially important because mothers are typically heavily involved in their child's illness management. Eighty-one mother-adolescent dyads participated in this study. Adolescents were between 10 and 15 years of age and diagnosed with type 1 diabetes. Both mothers and adolescents completed measures of maternal involvement in diabetes management and positive affect. They also completed a structured interview in which they described a recent diabetes stressor and listed three strategies they used to cope with the stressor. These strategies were then coded. Adolescents reported their coping styles changing as a function of who was primarily responsible for diabetes management. As the child assumed more responsibility, he/she engaged in more problem focused coping ( $p < .05$ ) and less emotion focused coping ( $p < .01$ ). The more involved mothers were in the diabetes management tasks, the more emotion focused coping she employed ( $p = .01$ ). Overall problem focused and emotion focused coping were unrelated to psychological adjustment and adherence in adolescents. However, regression analyses revealed that the variables interacted in a complex manner. A three-way interaction was found such that the effect of problem-focused coping in adolescents and their mothers interacted with diabetes responsibility ( $p = .08$ ). Best overall positive mood for the adolescent occurred when both mother and child used problem focused coping and the mother was highly involved in diabetes management. These results suggest that mother's coping, as well as her involvement in diabetes management are important in understanding the adjustment of adolescents to diabetes.

## Abstract 1417

## LIFE STRESS, GLYCEMIC CONTROL AND CHRONIC COMPLICATIONS IN DIABETIC PATIENTS

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The aim of this study was to examine the effects of glycemic control and chronic complications on reported stress of 316 diabetics. A cohort of 316 individuals (44.6% of which were males; 41.8% with Type 1 diabetes; 59.8% with disease chronic complications; aged between 16 and 84 ( $M = 48.39$ ,  $SD = 16.90$ )) was studied. Participants answered to the Life Experiences Survey in the context of a personal interview. Medical data about glycemic control and diabetes chronic complications were collected from hospital registers after informed consent. Glycemic control was determined through hemoglobin A1c (HbA1c). The results suggest that patients not suffering from chronic complications ( $t(314) = 4.12$ ,  $p < .0001$ ) and particularly from cataract ( $t(314) = 3.22$ ,  $p < .01$ ), macroangiopathy ( $t(314) = 2.93$ ,  $p < .01$ ), autonomic neuropathy ( $t(314) = 3.52$ ,  $p < .001$ ), sexual dysfunction ( $t(314) = 4.80$ ;  $p < .0001$ ), coronary heart disease ( $t(314) = 3.96$ ;  $p < .0001$ ), stroke ( $t(314) = 4.49$ ;  $p < .0001$ ), hypertension ( $t(314) = 4.84$ ;  $p < .0001$ ) and peripheral arterial disease ( $t(314) = 2.21$ ;  $p < .05$ ) present a higher level of positive life events during the last year when compared with patients who suffer from those sequelae. We found that patients who suffer from glaucoma ( $t(314) = -3.2$ ;  $p < .01$ ), macroangiopathy ( $t(314) = -3.83$ ;  $p < .0001$ ) and diminished libido ( $t(314) = -2.91$ ;  $p < .01$ ) present a higher level of negative life events during the last year than patients without those chronic complications. We did not find statistically significant differences between patients with retinopathy or nephropathy and those who do not have these sequelae in what concerns to reported positive and negative life events during the last year. Concerning glycemic control, results suggest that there are no differences between patients with excellent control ( $HbA1c = \text{or} < 6\%$ ), reasonable control ( $HbA1c = 7 \text{ to } 8\%$ ) and poor control ( $HbA1c > 8\%$ ) in what respects to reported positive and negative life events.

## Abstract 1520

## PREDICTORS OF FATIGUE IN FIBROMYALGIA

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In a longitudinal design, we evaluated a model that examined predictors of fatigue in fibromyalgia (FM) patients. Specifically, in the first phase of this research with aggregated (averaged) data, we examined the contribution of active and passive pain coping to pain and depression which, in turn, were hypothesized to lead to increased fatigue. In the second phase of the research using disaggregated data, we examined whether depression would mediate the effects of pain on fatigue. The sample consisted of 52 patients with confirmed diagnoses of FM. The sample was predominantly female (92%), Caucasian (88%), and of middle to upper-middle class socioeconomic background. The mean age of the sample was 53 years old, and the average duration of illness was 11 years. During a psychosocial interview, patients completed the Passive and Active Coping Scales of the Pain Management Inventory along with other measures of their health status. For each of the 5 following months, pain, depression, and fatigue were assessed during a telephone interview. Pain was measured by the AIMS Pain Scale; depression by the CES-D; and fatigue by an adapted version of the Multidimensional Assessment of Fatigue (Tack, 1990). Findings from the first phase demonstrated that passive coping contributed to higher pain ( $\beta = .51$ ,  $p < .001$ ) and depression ( $\beta = .26$ ,  $p < .05$ ). Pain ( $\beta = .27$ ,  $p < .05$ ) and depression ( $\beta = .54$ ,  $P < .001$ ) significantly predicted higher fatigue, as well as mediated the effects of passive coping on fatigue. The analysis of disaggregated data revealed that pain contributed to greater depression ( $\beta = .27$ ,  $p < .001$ ) which led to higher fatigue ( $\beta = .38$ ,  $p < .001$ ). Pain, however, retained a significant, independent relationship with fatigue ( $\beta = .13$ ,  $p < .05$ ). The findings thus confirm a disruptive cyclical pattern characterized by the contribution of maladaptive pain coping to both pain and depression which, in turn, contribute to greater fatigue.