91. DEPRESSION AND HIGHER IQ ASSOCIATED WITH PREMORBID TBI IN SCHIZOPHRENIA

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Exposure to traumatic brain injury (TBI) is associated with schizophrenia. It is not clear if TBI 1) produces phenocopies 2) increases penetrance or 3) has a spurious association with schizophrenia as a marker of some third factor. We examined clinical correlates of premorbid TBI in patients admitted to a schizophrenia research unit. History of TBI was assessed by chart review for 183 patients (113 males, 70 females). 93 patients (58 males, 39 females) also had structured clinical interviews with the Diagnostic Interview for Genetic Studies (DIGS) to assess TBI. Associations of TBI with sex, SES, race, diagnosis, symptoms (PANS, Hamilton Depression Scale) and neuropsychological measures were examined. Chart review (CR) and DIGS interviews yielded similar TBI rates with no significant sex or SES differences (though whites had significantly greater TBI exposure than nonwhites). Patients with and without TBI did not differ in global assessment of functioning, age of onset, or current age. TBI rates were similar in schizophrenia and schizoaffective disorder, and TBI was unrelated to schizophrenia subtype. Patients with TBI scored significantly higher on the HDS (t = −2.48, df = 24.21 and p = .02) but did not differ in positive or negative symptoms. Among medicated patients, patients with TBI had significantly fewer perseverative errors on the WCST (t = 2.30, df = 43.85, p = .026) and higher IQ (t = −2.17, df = 50, p = .035). Schizophrenia patients with premorbid TBI represent a subgroup with more depression and relative sparing of cognition. These data support the hypothesis that the association of TBI with schizophrenia is causal and not spurious.

92. CLOZAPINE IN THERAPY-RESISTANT SCHIZOPHRENIA: EXPERIENCE FROM PAKISTAN

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Clozapine is the first anti-psychotic agent with proven superiority over conventional neuroleptics in the therapy of treatment of refractory schizophrenic patients. Few studies have thus far reported its use in the developing countries. We conducted an open, prospective flexible dose study, involving 50 chronic treatment resistant schizophrenic patients (33 males and 17 females) diagnosed according to DSM-IV and treated with Clozapine (mean maintenance dose, 273 mg). Serial psychopathological rating were conducted during treatment follow-up for one year. Substantial improvements were seen in negative and positive symptoms and psychosocial functioning during Clozapine treatment. Younger age of onset was related to better improvement in positive psychotic symptoms in male schizophrenic patients. Our result suggests that Clozapine is highly efficacious, cost effective and can be utilized successfully in developing countries.

93. BEHAVIORAL PROFILES OF ADOLESCENTS PUTATIVELY PRODROMAL FOR SCHIZOPHRENIA

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The RAPP (Recognition and Prevention of Psychological Problems) Clinic was opened nearly two years ago at Hillside Hospital to identify and treat adolescents considered prodromal for schizophrenia. As a first step in developing an intervention program, we are establishing a profile of behavioral abnormalities that will help to identify these youngsters as early as possible. In this report, we present information obtained from interviews and self-reports obtained from RAPP patients and their parents. To date, data have been analyzed for 50 RAPP patients. Preliminary results obtained from the SIDP-IV, a semi-structured AXIS II interview, indicate that the RAPP adolescents are characterized by a range of schizophrenia-like symptoms. A substantial proportion of the RAPP population meet criteria for schizotypal (16.3%), schizoid (7.0%), paranoid (14.0%) and avoidant (20.9%) personality disorders, with a far greater proportion (nearly 50%) displaying subthreshold features across all four disorders. A number of more general behavioral characteristics have also been identified that appear to be characteristic of these adolescents. Data obtained from the Child Behavior Checklist (CBCL) indicated that parents described RAPP patients as displaying significantly fewer externalizing behavior problems than patients with other disorders; significant differences were found for both aggressive and delinquent behavior subscales. Consistent with the AXIS II findings, RAPP parents also endorsed more internalizing behaviors for their children relative to other treatment seeking adolescents. These findings suggest that a profile of behavioral characteristics can be established that will contribute to the early detection of adolescents who may be prodromal for schizophrenia.

94. NEUROPSYCHOLOGICAL CORRELATES OF MESIOTEMPORAL VOLUMES IN SCHIZOPHRENIA

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Despite evidence for mesiotemporal-limbic pathology in schizophrenia the functional correlates of these abnormalities remain largely unknown. In this study we investigated the neuropsychological correlates of posterior hippocampus, anterior hippocampus and amygdala volumes in 16 patients with schizophrenia either prior to pharmacologic intervention at the onset of their first-episode of illness (n = 10) or previously treated with antipsychotic medications (n = 6; median illness duration = 2.5 years). One hundred twenty four contiguous T1-weighted coronal MR images (slice thickness = 1.5mm) were acquired through the whole head using a 3D Fast SPOIR IR Prep sequence on a GE 1.5T MR imaging system. Volumes of the posterior hippocampus, anterior hippocampus and amygdala were computed from these MR images with reliable separation of the anterior hippocampus from the amygdala (ICCs for all regions were greater than .88). To limit experimentwise error bilateral brain structure volumes, which were adjusted for the effects of age and...
95. SMOOTH PURSUIT EYE MOVEMENT DYSFUNCTION IN PATIENTS AT CLINICAL RISK FOR SCHIZOPHRENA

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Research involving individuals at risk for schizophrenia has traditionally focused on the identification of early biobehavioral indicators of schizophrenia. Biobehavioral indicators are subtle neurocognitive deficits that can be accurately detected before onset of psychotic illness. Of the many neurocognitive domains that have been studied, eye-movement dysfunctions have been found to be among the most promising candidate indicators.

Early studies of the at-risk offspring and siblings of schizophrenia patients suggest the presence of eye movement impairments in at least a subgroup of subjects. However, more recently, detection of indicator deficits has focused on a new high risk population—subjects at clinical risk for schizophrenia. These subjects are characterized by symptoms that have been retrospectively identified with the schizophrenia prodrome.

In this study, we evaluated smooth pursuit eye movement performance in 29 adolescents at clinical risk for schizophrenia recruited from the RAPP (Recognition and Prevention of Psychological Problems) clinic (Barbara Cornblatt, Ph.D., Director) at Hillside Hospital/Schneider Children’s Hospital, which is a recently opened program specializing in the treatment and assessment of adolescents with early prodromal symptoms of schizophrenia. These at-risk subjects were compared with 25 adolescent patients diagnosed with schizophrenia, recruited from an adolescent inpatient unit at Hillside Hospital.

Preliminary results suggest that 28% of the adolescents at clinical risk for schizophrenia display impaired smooth pursuit eye tracking performance similar to that of patients with schizophrenia. These results provide early evidence of the presence of a well-established schizophrenia-specific neurocognitive deficit in subjects at clinical risk for schizophrenia.

96. AWARENESS OF MEMORY DYSFUNCTION IN FIRST-EPISODE SCHIZOPHRENIA


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Patients with schizophrenia manifest a high degree of generalized neurocognitive dysfunction, with particularly severe impairment in memory. There is growing interest in patient awareness of clinical and cognitive symptoms, since this has implications for treatment compliance and outcome. The present study reports preliminary data addressing awareness of memory dysfunction and its impact on daily activities in a cohort of prospectively ascertained first-episode patients with schizophrenia. Fourteen patients meeting DSM-IV criteria for schizophrenia or schizoaffective disorder rated their daily memory function in a number of real-life contexts and received formal neurocognitive tests of memory. Family members independently rated patient memory function, using the same test content that were performed in patient self-ratings. The results revealed a surprising concordance between patient and observer ratings of daily memory function; absolute scores of patients ratings did not differ significantly from observer ratings, though the correlation between patients and observers was less consistent. Both patients and informants agreed on ratings of the quality of recent episodic memory. Patient ratings of daily memory function correlated modestly with test based assessment of memory (range of correlations: .33 to .45). Informant ratings of recent episodic memory were more consistently associated with actual patient performance, particularly on measures of working memory and explicit recall. The findings indicate that patients have partial awareness of memory function as it impacts on recall of daily episodes. Test based assessment of memory provides an indirect indication of global memory capability in real-world situations, but is less directly associated with more specific daily functions.

97. THE HILLSIDE RAPP CLINIC: WHY THE SUDDEN INTEREST IN THE SCHIZOPHRENIA PRODROME?

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The RAPP (Recognition and Prevention of Psychological Problems) Clinic of Hillside Hospital is a research/early intervention center focusing on adolescents thought to be in the pre-psychotic or prodromal stages of schizophrenia. A major research goal of the RAPP clinic is to prospectively establish risk factors that predict future illness, since the current definition of the prodrome has been derived from retrospective research.

Clinical assessments, neurocognitive data and treatment outcome will be presented for 50 adolescents who have received at least one year of treatment. To date, four major non-specific disturbances have accounted for most referrals: a sudden decline in school functioning, increasing social withdrawal, emergence of odd behaviors and the presence of depression. Self reports by the RAPP adolescents indicate the presence of a range of schizophrenia-like symptoms, including schizotypal, schizoid, paranoid and avoidant features and elevated levels of social isolation. Parental reports further corroborate the presence of these characteristics. In addition, performance on measures of attention, working memory and...