

A Magnetic Resonance Imaging Study of Schizophrenia: Brain Structure and Clinical Symptoms By: A. H. Young et al. *Brit. J. Psychiat.*, 158: 158-164, 1992.

31 patients with schizophrenia and 33 normal control subjects underwent MRI. The BPRS was used to rate clinical symptoms and to estimate premorbid I.Q. All were right-handed.

The temporal lobe was significantly smaller on the left than the right in both the control and schizophrenic groups. The amygdala was smaller on the left than the right in controls but not in schizophrenic, the parahippocampal gyrus was smaller on the left side in the schizophrenic group but not in controls. In the schizophrenic group, ventricular enlargement and cerebral atrophy were significantly related to severity of symptoms. Patients with marked negative symptoms had a bilateral reduction in the size of the head of caudate, patient with marked positive symptoms had larger VBRs and again the clinical and morphometric changes were significantly correlated. There were no morphometric differences between patients with short duration (2 years or less) and chronic symptoms.

A. A.

Pre-Morbid Adjustment and Personality in Psychosis. Effects of Sex and Diagnosis By: Alice Foerster et. al. *Brit. J. Psychiat.*, 158: 175-176, 1992.

Pre-morbid schizoid and schizotypal traits and social adjustment were assessed blind to diagnosis by interviewing the mothers of 73 consecutively admitted patients with DSM-III schizophrenia and affective psychosis. Analysis of factors

associated with premorbid deficits showed a highly significant interaction of diagnosis with sex, such that schizophrenic men showed much greater premorbid impairment than with schizophrenic women or men with affective disorders. The results can be explained by a neurodevelopmental disorder in some schizophrenic males.

A. A.

Motor, Volitional and Behavioural Disorders in Schizophrenia. Assessment Using the Modified Roger's Scale. By: C.E. Lund, A. H. Morner, D. Rogers and P. J. McKenna. *Brit. J. Psychiat.*, 158: 501-507, 1991.

The assessment of catatonic symptoms of schizophrenia, unlike that of other schizophrenia symptoms, has not acquired accuracy and phenomenological rigour, and that distinction from extrapyramidal side effects is not always easy.

Catatonic symptoms might be simple disorders of movement, complex disorder of volition, very complex disorder of behaviour and disorder of speech. The descriptions of the catatonic symptoms were made before the introduction of neuroleptic drug. The extrapyramidal side effects of these drugs added a new dimension to schizophrenic motor disorder and complicated the interpretation of many of the phenomena seen in patients.

Modified Rogers' scale can rate abnormalities in movement / volition, speech and overall behaviour in schizophrenia. It is detailed, reliable and valid. It permits the isolation of a score for non extrapyramidal and hence presumably catatonic phenomenon.

E. H.

The Effects of Clozapine on Tardive Dyskinesia By: Lieberman J.A.; Satz B.L.; Hohns C.A.; Pollacks., Borenstein M., and Kame J. *Brit. J. Psychiat.* 158: 503-510, 1991.

T.D. was first identified nearly 3 decades ago. It is a serious limitation to neuroleptic medication. Its prevalence rate is 20%, the annual incidence rate is 5%, the spontaneous recovery is 32% in the subsequent year. It varies from mild to severe disabling symptoms. Clozapine rarely causes T.D. It is superior to CPZ and Haloperidol in antipsychotic efficacy. 30% of patients with refractory symptoms improve on it. In addition it may have a therapeutic role in T.D. The results of such trials are variable and limited by methodological problems. 43% of 37 patients have 50% or more reduction in T.D. symptoms, non developed T.D., of the 7 patients whom originally had no T.D. the therapeutic effect found to be greatest in severe T.D. especially tardive dystonia, less effects in choreo athetoid symptoms. The explanation may be that clozapine may suppress T.D. symptoms, It is the neuroleptic free period is which responsible for the improvement (passive therapeutic effect). Clozapine has active therapeutic effect.

A.R.

A Genetic Model Compatible with a Dimensional View of Schizophrenia By: Robects, D., and Clarrdg G. *Brit. J. Psychiat.*, 158: 451-456, 1991.

Despite the virtual certainty of the genetic involvement, the mode of inheritance in schizophrenia is still unknown. Most discussion has revolved around the single - gene models versus the multifactorial polygenic models. The model

adopted reflects the opinion of the viewer about schizophrenia. Yet both theories are contradicted by evidence. Schizophrenia is considered by the authors as a dimensional disorder that they developed a dimensional genetic model for its explanation "both the development and age of onset are explained". The general assumptions are (1) brain functions & mental activity are endproducts of multiple pathways result from block at one of those pathway's steps (2) mutations controlling the same pathway---> same block (3) different mutations ---> different phenotypes (4) these're gene-environmental interactions (5) there's gene - genes interaction (6) there's a threshold level of normal gene product required for normal functions.

Whether the "mutation" is complete or leaky the gene dose will be variable and permits environmental factory to play its role to affect the ultimate gene products and the terminal function - when the gene mutation is homozygotic there'll be 0% activity= full phenotype of schizophrenia, when it is heterozygotic there'll be 50% of the gene activity, thus the organism copes with 50% of activity, so between 50% and 0% there's an increasing spectrum of phenotype (from schizotype to schizophrenia).

The model explains intrafamilial and MZ twin differences in schizophrenia, phenotype depending on heavy mutation interacting with environmental factors.

The model explains the age of onset of schizophrenia by interaction between the gene activity and struse (environmental factors) leading to different copings and lowerings of the threshold needed to induce schizophrenia (degrees 50% activity ---- 0%).

A.R.

Anorexia Nervosa: Outcome and Prognostic Factors after 20 Years. By: Ratnasuriya, R.H.; Et-sler I.; Szmukler G. I. and Kus-sel G.F.M. *Brit J. Psychiat.*, 158: 495-502, 1992.

In this report 41 patient with anorexia nervosa admitted to the Maudsely Hos-pital between 1959 and 1966 were fol-lowed up after a mean of 20 years. The average age of patients at the time of fol-low - up was (40±9).

An assessment of general outcome (based on the Morgan-Russell scales) yeilded 3 outcomes: good (12 patient) in-termediate (13 patient) and poor (15 pa-tients). Six patients died from causes re-lated to anorexia nervosa and at least 15% developed bulimia nervosa. There was a general consistancy between the fol-low - up at 20 years and that previous-ly conducted five years after admission although with a few individual patients.

There were serious prognostic errors at the earlier follow - up. A poorer out-come was associated with a later age of onset, a history of neurotic and personal-ity disturbances, disturbed relationships in the family and a longer duration of the illness. However, it is never too late for treatment as patients can recover after several years of the illness. Yet the rate of recovery declined after 12-15 years of the illness.

A.A.

Auditory Selection and Event - Related Potential in Schizo-phrenia By: Ward. P.B.; Catts S.V.; Fox. AM., Michie P. J., and McConaghy N. *Brit J. Psychiat.* 158: 529-533, 1991.

Attentional deficits have been seen as a fundamental feature of schizophrenia. It may be due to lack of motivation or or-ganization of motor activity as well. Venables suggested that schizophrenics are unable to ignore irrelevant stimuli and if this to be true there should be a differential PN (processing negativity) between stimuli. Brain ERPs were re-corded in 10 unmedicated schizophrenics & in healthy controls (matched for sex and age) using multilisting task. Schizophrenics showed marked reduction in a long - duration attention related neg-ative ERP component (PN) which was elicited by attentional stimuli. The PN amplitude was significantly correlated with SAPs & SANS scores of schizo-phrenic symptoms, the P300 compo-nent was also reduced in amplitude in schizophrenics and was significantly cor-related with SANS ratings of negative thought disorder. These findings, provide neurophysiological evidence of impair-ment in the maintainance of selective at-tention and cognitive processes associat-ed with target detection among schizophrenics. The reduced PN in schiz-ophrenics implicates frontostriatel path-way in the etiology of attention deficit.

A.A.