Journal Abstracts

Overview : Toward a Dysregulation Hypothesis of Depression

By : Larry J. Silver and Kenneth L. Davis

Am. J. Psychiat., 142 : 1017 – 1031, 1985

Investigation into the role of the catecholamines in the affective disorders has suggested that these amines may contribute importantly to the pathogenesis of these disorders. A relative deficiency of catecholamines in central synapses has been hypothesized, and more recently it has been suggested that a net catecholaminergic activity might be increased in depression. In this article, the authors suggest that the activity of neurotransmitter systems in the affective disorders and related psychiatric syndromes may be better understood as a reflection of a relative failure in their regulation, rather than as simple increases or decreases in their activity. A model organised around the concept of 'dysregulation' posits that persistent impairment in one more neurotransmitter homeostatic regulatory mechanisms confers a trait-vulnerability to unstable or erratic neurotransmitter output.

Evidence from clinical and animal model studies for dysregulation of the noradrenergic system in depression is examined with respect to testable criteria for dysregulation of a neurotransmitter system. These criteria include evidence for defective mechanisms, erratic output of normal periodicities, inappropriate environmental responsiveness, defective habituation, and restoration of efficient function by clinically effective psychotropic medications of the putatively dysregulated neurotransmitter system. Finally, the authors propose a specific model of altered noradrenergic activity in depression in which noradrenergic neuronal firing is increased and erratic while norepinephrine released per nerve impulse is decreased, reducing responsiveness to

specific stimuli, a model which presents an example of how a dysregulation hypothesis may generate specific research strategies and help integrate diverse biologic findings in the affective disorders.

H. S.

Cerebral Metabolic Rates for Glucose in Mood Disorders

By : L.B. Baxter, M.E. Phelps, J.C. Mazziotta, J.M. Schwartz, R.H. Gerner, C.E. Selin and R.M. Sumida.

Arch. Gen. Psychiatry, 42 : 441 – 447, 1985

Cerebral metabolic rates for glucose were examined in patients with unipolar depression (N=11), bipolar depression (N=5), mania (N = 5), bipolar mixed states (N = 3) and in normal controls (N = 9) using positron emission tomography and flurodeoxyglucose F 18. Bipolar depressed and mixed patients had supratentorial whole brain glucose metabolic rates that were significantly lower than those of the other comparison groups. The whole brain metabolic rates for patients with birolar depression increased going from depression or mixed state to a euthymic or manic state. Patients with unipolar depression showed a significantly lower ratio of the metabolic rate of caudate nucleus, divided by that of the hemisphere as a whole, when compared with normal controls and patients with bipolar depression.

The authors consider these initial data to suggest that mixed states may be metabolically more closely related to depression than mania. These data suggest also that F 18 – PET revealed metabolic patterns that may be able to distinguish patients who will later prove to be bipolars from those who are truly unipolar – even in a first episode of depression in individuals with no prior psychiatric history.

O. A.

Hopelessness and Eventual Suicide : A 10 – year Prospective Study of Patients Hospitalized with Suicidal Ideation.

By : A.T. Beck, R.A. Steer, M. Kovasc and B. Garrison.

Am. J. Psychiat., 142 : 559 – 563.

During the last 25 years, hoplessness has emerged as an important psychological construct for understanding suicide.

It has been observed that when depressed patients believe there is no solution to serious life problems, they view suicide as a way out of an intolerable situation.

The authors intensively studied 207 patients hospitalized because of suicidal ideation, but not for recent suicide attempts.

During a follow-up period of 5 – 10 years, 14 patients committed suicide.

Of all the data collected at the time of hospitalization, only the Hosplessness scale and the pessimism item of the beck Depression Inventory predicted the eventual suicides. A score of 10 or more on the Hoplessness scale correctly identified 91 % of the eventual suicides.

These results support previous reports indicating the relationship of hopelessness to suicidal wishes and behaviours. They also point to the utility of hopelessness as a construct in the assessment of suicidal risk. The authors also point to the role of present hopelessness in predicting future suicides among ideators over a relatively long time span.

H. S.

Depression, Drugs, and Delusions

By : Brain G. Howarth, Michael G.A. Grace

Arch. Gen. Psychiatry, 42 : 1145 – 1147, 1985.

This study, a retrospective review of clinical experience, investigated response to tricyclic antidepressants in a group of 34 depressives with delusions and a group of 22 depressives without delusions. There was no difference between the groups in terms of their age, sex, or dosage of tricyclic antidepressants. The pattern when patients left tricyclic therapy for electro-convulsive therapy was similar in both groups. For those responding to tricyclics, the non-delusional group responded within the first three weeks of therapy, whereas for the delusional group the responders were more spread throughout the nine weeks.

A number of recent studies have reported that delusional depressives treated with tricyclic antidepressants fail to respond. In most of these studies, however, the trial was terminated on or before 28 days. In this present study 43% of those delusional depressives who might ultimately recover, while receiving tricyclics, will do so between 28 and 63 days. Another possible explanation for the unusual results in this study is the fact that tricyclic doses were carried to unusually high levels in cases of nonresponse before restoring to E.C.T. Interestingly, the high doses occur most frequently in the delusional responder group.

Q. A.

Treatment Outcome Validation of DSM-III Depressive Subtypes

By : Jonathan W. Stewart, Patrick J. McGrath, Michael R. Liebowitz, William Harrison, Frederic Quitkin and Judith G. Rabkin.

Arch. Gen. Psychiatry, 42 : 1148 – 1153, 1985

An algorithm for transcribing Research Diagnostic Criteria diagnoses for depressive disorders to similar categories in the DSM-III was applied to 103 depressed outpatients previously diagnosed by Research Diagnostic Criteria. All had Hamilton Depression Rating scale scores of 18 or less. Among 64 patients completing a six-week, double blind study comparing desipramine hydrochloride with placebo, desipramine was significantly more effective than placebo in patients with DSM-III major depression but not in those with dysthymic disorder. Among patients with major depression, a significant drug placebo response difference was demonstrated even in those without melancholia. These findings support the clinical usefulness of the DSM-III in the treatment of depressed outpatients. Independent of DSM-III diagnosis, however, evidence of panic attacks seemed to identify patients who benefited from desipramine therapy. This suggests that the DSM-III hierarchy which excludes consideration of panic in patients with magor depression, may require revision.

O. A.

Extended Sleep (Hypersomnia) in Young Depressed Patients

By : D.R. Hawkins, J.M. Taub and R.L. Van de Castle

Am. J. Psychiat., 142 : 905 – 910, 1985.

Most of the studies of sleep in affective illness until recently have involved patients in middle life. Clinical observation that university students with depression reported more, rather than less, sleep in most instances led the authors to study the sleep of young depressed patients.

14 depressed patients aged 17–25 and age-matched normal control subjects were allowed to sleep as long as they wanted. All subjects increased their sleep over baseline values, but the extended sleep period of the depressed patients was almost twice as long as that of the control subjects.

The effect of extended sleep on mood was different in the two groups. While the normal control subjects were subjectively less activated and more fatigued, the depressed patients were more activated and less fatigued than after the shorter baseline night.

The distribution of sleep stages in the extended period did not differ. The depressed patients had changes in the length of REM periods similar to those of older subjects, i.e, shortened REM latency.

The findings of this study suggest an interaction between age, sleep and depression.

H. S.

Diagnostic Categorisation of Psychiatric Disturbance in Cushing's Syndrome

By : Roger H. Haskett

Am. J. Psychiat., 142 : 911 – 916, 1985

A particularly high prevalence of affective symptoms and signs have been noticed in Cushing's syndrome. Such symptoms and signs are in some instances indistinguishable from those of patients with primary psychiatric illnesses. A separate line of investigation has also found a relationship between affective disorder and dysfunction of the hypathalamic - pituitary - adrenocortical axis.

In this study the author obtained a longitudinal psychiatric his-

tory from 30 patients with proven Cushing's syndrome. They were evaluated both endocrinologically and psychiatrically. Twenty-five (83%) of the patients met strict diagnostic criteria for an episode of affective disorder during the course of their illness. Twenty patients met criteria for endogenous depression and eight patients also reported an episode of mania or hypomania. The results of this study do not support the suggestion that the psychiatric disturbances seen in Cushing's syndrome either are an exacerbation of previous psychological difficulties or are manifested only in individuals with a genetic or constitutional vulnerability to psychiatric disorder. None of the patients in this study showed a picture that would be diagnosed as schizophrenia, as the two patients with delusions met criteria for a psychotic depression. Patients frequently attempted to minimize or conceal serious psychiatric disturbance, including a suicide attempt. Typical affective syndromes occurred in patients with adrenocortical tumors as well as in those with ACTH-dependent Cushing's syndrome.

H. S.

The Course of Psychosis in Early Phases of Schizophrenia

By : M. Harrow, B. J. Carone and J. F. Westmeyer.

Am. J. Psychiat., 142 : 702 – 707, 1985.

In this article the authors present data on whether psychotic symptoms in young schizophrenic patients show a systematic clinical course in the early stages of their disorder, as it has been shown by recent studies and clinical observation that today's schizophrenic patients do not follow the kraepelinian concept of progressive downhill course. To achieve their objective, the authors assessed 111 patients at hospitalization and at one or two follow-ups. The data on psychosis were analyzed in terms of both broad (DSM-II) and narrow (DSM-III) concepts with schizophrenia, with diagnoses made blind to subsequent outcome. The 111 patients met DSM-II concept and 45 of them fit the

DSM-III criteria for schizophrenia. Follow-ups showed that patients diagnosed with DSM-II improved between the first and second follow-ups. Those also diagnosed with DSM-III showed improvement in psychosis even after several years of sustained symptoms.

The authors discuss the implications of the data for views about the persistence of psychotic symptoms.

In accordance with Zubin's model, which states that what is continuous in schizophrenia is the vulnerability or potential for episodes rather than the episode itself, the results in this study, which show psychosis persisting in the follow-up period, fit in with the view that schizophrenic patients are vulnerable to episodes of psychosis which are most severe at the acute phase and then persist in a prolonged phase of reduced intensity, often for years after hospitalization.

At last the article describes three types of courses of psychosis; the first shows reduction or complete elimination of psychosis during hospital treatment; the second is that of persistent psychosis that continues throughout hospitalization and then persists in a reduced intensity, and the last course which shows a reduction in psychosis several years after hospitalization.

H. S.

Psychotic Syndromes in Epilepsy

By : P. J. Mckenna, J.M. Kane and K. Parrish

Am. J. Psychiat., 142 : 895 – 904, 1985.

Belief in an intimate relationship between epilepsy and mental disorders has one of the longest traditions in psychiatry. Two themes have dominated psychiatric thought on the link between epilepsy and psychosis; one has been that the disorders are related in an inverse antagonistic manner, a view which was responsible for the introduction

of E.C.T. The other view of association, however, has become the dominant theme in modern work. This review of literature discusses the existence of brief nonconfusional psychotic episodes in epilepsy, the validity of the association between epilepsy and persistent psychosis, clinical and etiological aspects of epileptic psychoses, and the implications for psychosis in general.

It is now clear that many of the short-lived psychoses of epilepsy are ictal ar postical confusional states which have EEG correlates. The tradition nonetheless survives that some brief, self-limiting psychotic episodes in epilepsy are not ictal or postictal events and do not show clouding of consciousness. These episodes are thought to be a function of temporal lobe subictal activity.

Persistent psychosis is found in about 7% of patients with epilepsy. Temporal lobe seizure activity, probably acting subictally may be involved in these states, perhaps in interaction with other factors.

The article raises an important issue which is the justification for an extension of the term epileptic psychosis to include some atypical psychoses occuring outside epilepsy which show phasic course, presence of catatonic phenomena, and lack of family history of psychosis.

Psychotic syndromes in epilepsy might also be relevant to kindling and also to the increasing evidence of the therapeutic role for carbamazepine in some psychotic disorders. Carbamazepine has a selective effect on kindled limbic system activtiy and may specifically inhibit the propagation of kindling-associated after-discharges. The authors also suggest that elements of temporal lobe epilepsy, kindling and atypical psychosis might be brought together into a coherent theme, a theme that could ultimately provide the key to a further persistent and intimately related enigma, the mechanism of action of E.C.T.

H. S.

Dissociation and

Psychotic Symptoms

By : S. Steingard, and F. Frankel.

Am. J. Psychiat., 142 : 953 – 955, 1985.

The literature on hysterical or brief reactive psychosis reflects great diversitey both in clinical description and theoretical formulation.

The absence of the typical premorbid and postmorbid personality characteristics, and the rapidity of both onset and recompensation, highlight the differences between schizophrenia and these events.

The authors examine the literature in a trial to unify the theories that account for this syndrome and conclude that a heterogeneous group of patients is being described. The term 'hysterical psychosis' was introduced to account for a group of these patients. Another group of patients with border-line personalities complicated by psychotic episodes was also described.

The authors believe that an important mechanism to account for one type of transient or recurrent event of psychotic symptoms is dissociation. They report on a case of a 17– year old girl who presented with a diagnosis of bipolar affective disordes, rapid cycling type, but who, in fact, was experiencing dissociative episodes manifested as psychotic states. The patient responded superbly to a routine hypnotic induction procedure, she hallucinated spontaneously, and she rapidly learned to use self-hypnosis to control her symptoms.

The authors conclude that brief reactive psychosis in reality includes a variety of disorders and psychopathologies. In this paper, a special attention has been paid to delineate only one variety, that associated with dramatic dissociation.

H. S.

Tourette Syndrome, Pimozide, and School Phobia : The Neuroleptic Separation Anxiety Syndrome.

By : Leslie L. Linet.

Am. J. Psychiat., 142 : 613 – 615, 1985

Since the discovery in 1960s that haloperidol supresses symptoms of Tourstte syndrome, it has become the drug of choice in the treatment of this disorder. However, neuroleptic-induced school phobia has been reported in some patients using halopeirdol. Clonidine, a non-neuroleptic drug, has also been introduced in the treatment of Tourette syndrome, with less cognitive blunting and no reported school phobia.

A recent drug in the treatment of Tourette disorder is pimozide which was reported to be more effective and to produce fewer side-effects. However, in this article, the author reports on a patient who developed school phobia on each of three trials with pimozide, and proposes the term. "neuroleptic separation anxiety syndrome". The concomitant use of antidepressants may inhibit the development of school phobia as a side effect of neuroleptic treatment.

The author suggests that the emergence of phobic syndromes in Tourette syndrome during treatment with neuroleptics may be related to the neurochemical pathophysiology of the syndrome. She also suggests that identifying pretreatment findings of mild separation difficulties and/or a positive family history for panic disorder or agoraphobia might be helpful as a possible cautionary signal.

H. S.

Brain Metabolism in Autism

By : Judith M. Runsey, Ranjan Duara, Cheryl Grady, Judith L. Rapoport, Richard A. Margoline, Stanley I. Rapoport, Neal R. Cutler, Bethesda.

Arch. Gen. Psychiatry, 42 : 448 – 457, 1985

The cerebral metabolic rate for glucose was studied in ten men ($\bar{X}$ age = 26 years) with well documented histories of infantile autism and in 15 age matched normal male controls using positron emission tomography and (F–18). While the autistic group as a whole showed significantly elevated glucose utilization in widespread region of the brain, there was considerable overlap between the two groups. No brain regions demonstrated lowered glucose utilization. No common localised metabolic abnormalities were identified. Significantly more autistic, as compared with control subjects, showed extreme relative metabolic rates (ratios of regional metabolic rates to whole brain rates and asymmetries) in one or more brain rogions (frontal, parietal and limbic regions). These limited differences are, however, difficult to interpret given the large number of statistical tests performed and the diffusely elevated absolute metabolic rates. It may be that multivariate techniques or regional intercorrelations designed to look at overall patterns (as opposed to individual regional rates) might yield more coherent group differences. Such techniques will be applied if a larger sample size can be achieved.

O. A.

Psychiatric Aspects of Traffic Accidents

By : Ming T. Tsuang, Myron Boor and Jerome A. Fleming

Am. J. Psychiat., 142 : 538 – 545, 1985

The incidence of traffic accidents and the traffic violations that often cause them has continued to remain high. In this article, the authors review the literature pertaining to the roles of psychopathology and personality variables in traffic accidents.

An epidemiological approach to the study of traffic accidents stemmed initially from the early studies of accident-proneness in industrial settings. Later, a major portion of the research focused on the psychological and psychiatric characteristics of automobile drivers who are involved in accidents. The studies reviewed in this article include non-psychiatric and psychiatric samples. They examine the roles of suicide, life events, alcohol and drugs.

The concept of accident-proneness is stressed. Certain personality characteristics and psychopathology such as low tension-tolerance, immaturity, personality disorder, and paranoid conditions appear to be risk factors for traffic accidents. The role of alcohol is relatively established, while the roles of most of the other drugs are less clear.

Significant relationships of specific psychiatric diagnoses to the incidence of traffic violations and accidents made the authors suggest the need to investigate specific risk factors that might be associated with these diagnoses and their correlated traffic violations and accidents. Potential risk factors that might be assessed on the basis of patients' hospital records include their medications, physical and medical problems, drug or alcohol abuse, and suicidal thoughts and behaviors.

The results of the investigation of psychopathology's role in traffic accidents are likely to have implications for accident prevention. The identification of specific risk factors would help formulate remedies and interventions.

H. S.

A Typology of Near-Death Experiences.

By : Bruce Greyson

Am. J. Psychiat., 142 : 967 – 969

Near-death experiences, profound subjective events often experienced on the threshold of death, have recieved much attention in recent years, but little analytical investigation.

In 1983, the author developed a scale that quantifies the cognitive, affective, paranormal, and transcendental components of the near -death experience.

Sabom has proposed a typology of near-death experiences in which he suggested that the experience may be "autoscopic" or "transcendental". Discrete types on near-death experiences may result from different mechanisms and may produce different after-effects. This paper reports a cluster analysis of 89 of these experiences and the typology resulting from it.

The results showed three discrete types of such experiences : transcendental, affective and cognitive. Demographic variables were not found to differentiate individuals having these different types of experiences, but cognitive near-death experiences were less frequent following anticipated near-death events. This differentiation of near-death experiences into the proposed discrete types may lead to further insights into the mechanisms and effects of these phenomena.

H. S.