Journal Abstracts

Psychiatric Uses of Antiadrenergic and Adrenergic Blocking Drugs

By : J. M. Johnson

The Journal of Nervous and Mental Disease, 172: 123 – 132, 1984

The article reviews the literature concerning the established, potential, and controversial psychiatric uses of drugs that affect noradrenergic functioning and that are being used in the control of hypertension. Propranolol, a beta blocker, is at present the most widely accepted in the psychiatric profession. Its current indications in psychiatry are: 1) the prophylaxis against migraine headache (40 – 60 mg/day); 2) the control of essential, familial, senile, and lithium induced tremors (20–40 mg); 3) the control of aberrant behaviour after brain damage; 4) the treatment of mild and moderate cases of benzodiazepine and alcohol withdrawal syndromes, and in combination with chlordiazepoxide for the control of severe cases (60–160 mg/day); 5) the somatic components of chronic anxiety disorders (40–120 mg/day); 6) agoraphobia with panic attacks; and 7) as a trial to control refractory cases of schizophrenia, manic-depressive illness and tardive dyskinesia. Metoprolol is a more specific bete--1--blocker. It is indicated as a substitute for propranolol especially in cases of tremors in patiants suffering from bronchospastic disease.

Clonidine activates presynaptic alpha --2-- adrenergic receptors, tbereby inhibiting catecholamine release. Clonidine is currently established in the treatment of : 1) opiate withdrawal (0.4–1.2mg/day); 2) Tourette's syndrome as a second choice after haloperidol (0. 3–0.4 mg/day); and 3) tardive dyskinesia (0.2–0.9mg/day). Less established

indications include the control of schizophrenia, bipolar disorder, the improvement of memory in korsakoff syndrome and anxiety disorders.

Methyldopa is a competitive inhibitor of ddpa decarboxylase and displaces dopamine in presynaptic vesicles by becoming methyldopamine. It is of potential in the control of tardive dyskinesia and extrapyramidal symptoms as well as in the control of the menopausal syndrome. Finally reserpine still has a role in the control of resistant cases of schizophrenia and mania.

E. H.

Response to Antipsychotic Medication: The Doctor's and the Consumer's View.

By: T. Van Putten, P.R.A. May and S.R. Marder

Amer. J. Psychiat., 141: 16–19, 1984

The authors assessed the subjective response to test dose of haloperidol (5 mg) and thiothixene (22 mg/kg) in two groups of 65 and 40 schizophrenic patients respectively over a 24–hour period. Medications were continued at fixed doses for 4 weeks together with assessment of subjective response, clinical outcome and the occurrence of akathesia.

Dysphoric responses to the first dose and after one week of both drugs correlated significantly with later dysphoric responses after 28 days of treatment. Dysphoric responses were more associated with later non-compliance to drug treatment, and were significantly associated with the occurrence of akathisia. A dysphoric subjective response could not be significantly correlated with either clinical outcome or a higher plasma level of the drug.

The authors conclude that dysphoric subjective responses should be considered as a clue to future non-compliance and as a component of akathisia that could be corrected by antiparkinsonian drugs.

E. H.

Some Biochemical Correlates of Panic Attacks with Agoraphobia and Their Response to New Treatment

By: D.V. Sheehan, J.H. Colewan, D.J. Greenbldtt, K.J. Jones, P.H. Levine, P.J. Orsulak, M. Peterson, J.J. Schildkrout, E.Uzogara and D. Watkins.

J. Clinical Psychopharmacology, 4: 66–75, 1984

The study compared the effects of the benzodiazepine alprazolam to the anti-inflammatory agent ibuprofen in the treatment of 32 chronic patients suffering from agoraphobia with panic attacks. Drug-free patients were randomly assigned to either 2–6 mg/day alprazolam or 0.8– 2.4 g/day ibuprofen. Patients were blind to their medicatian status. Alprazolam produced marked improvement with respect to physician and patient global rating of disease severity, frequency and severity of panic attacks and phobic anxiety subscale on the 90– item Hopkins Symptom ckecklist. Ibuprofen produced significantly less clinical improvement than alprazolam. Ibuprofen patients were crossed over to alprazolam after 8 weeks of treatment and maximum dosage was increased to 10 mg/day of alprazolam. All patients achieved comparably marked clinical improvement relative to baseline. Pretreatment plasma concentrations of platelet factor 4 and B thromboglobulin, which are measures of platelet turnover and release, were significantly elevated in patients compared to normal controls. These normalized during treatment with both druge. However, the latter biochemical findings could be nonspecific indicators of stress.

E. H.

A Comparative Outcome Study of Individual, Group and Conjoint Psychotherapy

By: P.A. Pilkonis; S.D. Inber, P. Lewis and P. Rubinsky

Archives of General Psychiatry, 41: 431–437, 1984

Sixty four out-patients with mixed diagnoses (characterological problems and affective disturbances) were assigned to either indivi-

dual, group or conjoint (patient and significant other treated together) therapy. Treatment was carried out by experienced clinicians (mean, 11. 2 years of experience) for an average of 26.8 sessions on a weekly basis. Patients and significant others were assessed at intake, at termination and at follow-up (average, 31 weeks). Assessment included genenal measures of outcome, i.e., symptoms ratings and target complaints as well as indexes of change specific to each mode of therapy, i.e. private self-awareness (individual therapy), interpersonal functioning (group therapy) and family environment (conjoint therapy). In all the modes of therapy 14 out of 15 general measures of outcome generated from patient, significant other, and therapist showed significant improvement from intake to termination ($P < 0.001$). The same trend was maintained at follow-up (9 out of 10 measures ($P < 0.001$). These results reflecf significant improvement of the sample as a whole. Mode specific indexes reflected significant changes in interpersonal functioning and partial improvement in family environment. Differences among the modes of therapy appeared in some of the outcome measures, but these were more often attributable to differences among the therapists or to a particular fit between specific patient characteristics and a specific mode of therapy. The patient's view of the family, the significant other's view of the patient, and the significant other's own adjustment tended to vary together. These findings demonstrate the importance of a multi-dimentional approach to understanding fully the effects of psychotherapy.

E. H.

Working Memory

By: G. J. Hitch

Psychological Medicine, 14: 265–271, 1984

A feature of much research on short-term memory was that it tended to concentrate on tasks involving the storage of strings of digits, letters or words, while ignoring broader questions about its function as a working memory in normal cognition. Working memory was seen

as a set of limited capacity subsystems comprising a central executive attentional system controlling slave subsystems which specialize in different types of memory storage. The latter included a speech- based "articulatory loop" associated with subvocal rehearsal, and a visio-spatial subsystem involved in imagery, subsequently referred to as the "visio-spatial scratch-pad".

The author has not attempted a systematic review of the literature on working memory, particularly the nature of the central executive subsystem or the role of working memory subsystems in activities like reading or mental arithmatic. He concentrated on articulatory loop and visio-spatial scratch-pad. An attempt was made to illustrate the close relationships that exist between studies of normal iunction and the investigation of certain types of neuropsychological disorders, and the possible further contribution that can be made by the study of developmental changes in working memory.

A. S.

Disorders of Memory, Language and Beliefs Following Closed Head Injury

By: J. Hill.

Psychological Medicine, 14 : 193–201, 1984

A 26– year– old man developed a syndrome following a closed head injury, characterized by disturbance of memory, language, and beliefs, and lasting for several years. The case was of interest for three reasons. First, there are symptoms and signs that could reasonably be assigned to more than one descriptive category (e.g., delusion and confabulation) and require detailed consideration. Secondly, the clinical picture is suggestive of a number of conditions, but diagnostic of none. Thirdly, the condition appears to be the result of complex interaction of organic, psychological and social factors. The author discussed in turn the language disorder, the abnormal

beliefs, and the memory deficit, and he considered how, in relation to these, the literature on a number of syndromes may illuminate this clinical problem.

A. S.

Genesis and Evolution of Behavioral Disorders: From Infancy to Early Adult Life

By: A. Thomas and S. Chess

Amer. J. Psychiat., 141: 1 – 9, 1984

The authors summarize their findings extending over a 25– year period in an anterospective study of 133 subjects followed from infancy to early adulthood. The purpose of the study has been the identification and categorization of temperamental characteristics and the study of their influence on normal and deviant psychological development.

An impressive amount of data gathered longitudinally directly from the subjects, from parents and teachers, and through observation at fixed periods during development, and on occasion of special life events. Both clinical and standardized psychometric assessments were made.

Temperament is a concept basic to the study. It describes behavior without reference to etiology according to nine separate dimensions, viz. activity level, rhythmicity (regularity) of biological functions, approach or withdrawal from novel stimuli, adaptability, threshold of responsiveness, intensity of reaction, quality of mood, distractibility, and attention span and persistence.

Combined qualitative and factor analysis of the data yielded three temperamental constellations given the terms: the easy child (40% of the sample), the difficult child (10%), and the slow-to-warm-up child (15%). The "easy child" is characterized by being regular, approaches new stimuli positively, adapts readily to change, and has

a predominantly positive mood. The " difficult child" is almost the exact opposite of the "easy child". The "slow-to-warm-up" child is characterized by mildly negative initial responses to new stimuli with slow adaptability after repeated contact. The remainder of the sample showed mixed characteristics of more than one temperamental constellation.

The data were correlated statistically through multiple regression analysis showing the following significant correlations (0.05 level): 1) between easy - difficult temperament at 3 years and in early adult life; 2) between easy-difficult temperament at 3 years and early adult adjustment (easy temperament correlates with better adult adjustment); 3) between parental conflict at 3 years and a poorer early adult adjustment; 4) between adjustment at both 3 and 5 years and early adult adjustment; 5) between clinical case status in childhood and in early adult life; and 6) between clinical case status in childhood and a poorer early adult adjustment.

Qualitative analysis of the results demonstrated that the interaction between the individual and the environment is more important in shaping character, producing psychopathology, or correcting it than either innate traits or environmental influence alone. Pathogenic influences or stresses were not detected in the early years of life preceding the development of psychiatric disturbance, which questions Freud's dictum that neuroses are acquired during the first six years of life. Anxiety was found to be a result of conflict not a basic pathogenic phenomenon. The authors emphasize the concept of "goodness of fit" as a more suitable model for understanding developmental sequences. Goodness of fit results when the properties of the environment and its expectations and demands are in accord with the organisms own capacities, notivations, and style of behaving. Poorness of fit involves dissonance between individual and environment.

Follow-up of the cases that developed behavior disorders showed that the majority improve by adulthood. Parental guidance in the