

behavioral sciences

From our reporter at the meeting of the American Psychiatric Association in Dallas

Drug-hormone treatment of depression

Depressive disorders have been linked to a deficiency of the hormone norepinephrine (NE). On recovery from such illness there is increased systolic blood pressure response to infused NE, compared with pre-treatment response. This response is related to the degree of improvement.

Ian C. Wilson and Lacoë B. Alltop of the North Carolina Department of Mental Health in Raleigh and Arthur J. Prange of the University of North Carolina report that normal subjects medicated with imipramine (IMP) show an enhancement of NE-induced blood pressure. They also found that the addition of L-tri-iodothyronine (T3) to the IMP will enhance its antidepressant activity. So they tested a combination of the drugs on 27 depressive patients. One group received T3 plus placebo, another IMP plus placebo, and a third received IMP plus T3. Behavioral and physiological tests were given before and after treatment. Sensitivity to NE increased in all groups, but was most remarkable in the IMP-T3 group. The amount of NE needed to raise blood pressure was less and the degree of recovery was greater.

The changing clinical scene

The types and frequencies of mental illnesses can be a kind of social barometer. At Denver State Hospital in Massachusetts 444 first admission case histories from 1934 to 1941 were compared to 356 cases admitted from 1961 to 1968. Elizabeth Mary Remar of the Department of Mental Health in Boston and Peter B. Haggopian of the Denver hospital examined data on the primary dimensions of change. The number of catatonic schizophrenics decreased from 10.0 percent to 5.0 percent of the total admissions. Manic-depressive-manic decreased from 2.0 to 0.73 percent; manic-depressive-depressed from 2.4 to 0.22; involuntional melancholia from 2.1 to 0.91, and central nervous system syphilis from 3.5 to 0 percent. Qualitatively, the symptoms for the second period tend to be more moderate, credible and generally less fanciful. This, the researchers say, is due to public education and the fact that people now seek help in the early stages of their illness. Also, they say, social mores have changed. In the earlier period society was more repressive. In a more permissive society eccentricities and expressions of aggressiveness and hostility are more tolerated and the total flight from reality is less necessary. Advances in treatment, especially in the case of syphilis and penicillin, have helped to reduce and modify hallucinatory and delusional behavior.

Psychedelic therapy

No single therapy for heroin addiction has been found to be completely effective. A variety of approaches must be explored and used. Charles Savage, O. Lee McCabe and Albert A. Kurland of the Maryland Psychiatric Research Center in Baltimore report success in a program using a combination of psychotherapy and LSD. A controlled study was made using 74 volunteer parolees. Half of the group received weekly group therapy, parole supervision and urine monitoring. The experimental half received 24 hours of intensive therapy during a five-

week period. This was followed by one high-dose LSD session and an additional week of therapy in order to integrate the experience.

Psychological tests were administered before and after treatment. In general the LSD patients were much improved. Depression and impulsivity were reduced and there was an increase in ego strength, existential values and capacity for intimate contact. After one year 24 percent of the LSD group had maintained total abstinence from heroin. Only 5 percent of the control group were drug free. The researchers do not know to what extent LSD (as opposed to the group experience and therapy) is responsible for the results. They do note, however, that the patients considered the psychedelic experience an important part of the treatment.

Psychotic behavior and muscle changes

Many acutely psychotic patients also suffer from muscle disease. Robert G. Heath of Tulane University Medical School in New Orleans has been studying the pathology of the brain's septal region since 1952 (SN: 4/22/72, p. 263). He now reports that this region of the brain is associated with metabolic changes, including body-temperature regulation and the specific muscle abnormalities sometimes seen in psychotic patients.

With electrode or cobalt implantation, brain lesions were made in a series of 18 monkeys. The lesions in the septal region consistently resulted in behavioral and metabolic changes concomitant with significant elevations in serum muscle enzyme levels. The monkeys became catatonic, their temperature control was impaired and muscle wasting was profound. Changes became apparent within two days. Lesions in other areas of the brain did not produce the same behavioral or metabolic changes.

The battered-child syndrome

Child abuse is a highly emotional public health problem that usually centers around treatment of the child. J. A. Guide, J. A. Haberland, L. Israel and S. O'Donoghue of Orange County Medical Center in Orange, Calif., reported on the identification, phenomenology and associated psychosocial factors leading to child battery, rather than on the battered-child syndrome itself. Of 200 persons involved in child abuse at the parent-child clinic, 100 were randomly chosen. Psychiatric evaluation revealed that 85 percent of the patients identified with an aggressive, authoritarian parent, and 95 percent has repressed anger toward their own parents. The personality was characteristically that of immaturity with capricious changes in mood. Most demonstrated a pathological denial of aggressiveness toward the child.

"Rather than consider all child abusers as psychotic or personality disorders or as neurotic," the researchers conclude, "the longitudinal history and evaluation of the current situation can provide satisfying criteria in most instances in order to provide an appropriate treatment program." Their treatment consisted of individual and group psychotherapy, pharmacotherapy, economic assistance (95 percent of the patients were indigent) and manipulation of the social environment.