by overprotection as a reaction to feelings of guilt, or by an inconsistency in handling. Feeling more insecure than the average child, such children are impelled by the necessity of extracting from their parents and other adults expressions of being welcome or important. Thus they are peculiarly sensitive to attention. They derive a certain satisfaction from having their mothers upset about them, and much of their specific behaviour represents a discovery on their part of what their mothers fear the most. The conclusion is that maternal rejection is an important factor underlying the insecurity which often accompanies the clinical picture of emotional instability.

C. S. R.

PSYCHOSES


In 24 normal male subjects and in 72 schizophrenics free from detectable organic disease, the reaction of blood-pressure and pulse-rate to the intravenous injection of 0·05 mg. of epinephrine was investigated. It was found that the maximum change was attained within the first minute after injection. The mean rise in systolic pressure in the schizophrenics was 43·8 mm., and in the normal subjects, 56·2 mm. The difference between these two values is statistically significant and indicative of a diminished reactivity to the drug in the psychotic group. In the case of the diastolic pressure the reaction was quite variable and the mean change in both patients and normal subjects was slight. There was, however, a greater tendency for the patients to show a rise in the diastolic pressure. In them the mean increase in pulse-rate was 13·6 beats per minute, and in the normal subjects 16·3 beats. No correlation was found between the extent of the reaction and the initial levels or between the reaction to epinephrine and the rate of oxygen consumption, nutritional index, schizophrenic subclass, psychiatric status, or emptying time of the colon. Age apparently had a slight effect in lessening the total degree of response. No characteristic syndrome of autonomic balance was found in schizophrenia.

C. S. R.


Schizophrenia is not regarded as a constitutional disease or a psychogenic reaction, but a disorder of the total personality resulting in dissociation of functions up to complete dissolution, and, on the other hand, capable of showing remissions. While the causes are undoubtedly multiple, it is said that the constitutional element (somatic) responsible for the production of
the disorder is to be sought at the level of the reticulo-endothelial system, particularly at the capillary endothelium. Experience will furnish the exciting or precipitating (relatively causative) factors. It may also be responsible for quickening the individual's predisposition, such as heredity. It is assumed that schizophrenic manifestations are biochemical in their source. The neuropathology is primarily expressed in capillary encephalopathy. The extraneural pathology is regarded as an outcome of capillary incretovisceropathy.

C. S. R.


In the discussion of the application of Mendelism to the inheritance of manic-depressive psychoses, reasons are given for doubting the theoretical basis underlying the application of such laws to mental disorders. These reasons appear more cogent in connexion with the inheritance of dementia praecox. It should be noted that those methods which enable the observer to classify the parental generations in plants and animals in Mendelian terminology, are largely inapplicable in the case of man, and the genotypes representing dominance among the latter are therefore a matter of supposition rather than of observation. This uncertainty in the parental generation affects the validity of the interpretations of the filial generation. In the second place, as pointed out by Bleuler, there is doubt whether dementia praecox is a unitary disease, and it is possible that the aetiology may differ in the several types. Furthermore, there is reason for believing that environmental agencies affect the origin and course of the disease and thereby influence the totals of affected offspring. The fact that the latter are so much less than the totals required by Mendelian theory points to the probability that though inheritance plays a rôle in the transmission of these diseases, environmental influences nevertheless are also important factors.

C. S. R.

[169] Phytotoxic index. 1. Results of studies with sixty-eight male schizophrenic patients.—W. Freeman, J. L. Mooney and R. R. Small. Arch. of Neurol. and Psychiat., 1934, 32, 554.

The use of viable plant protoplasm as a toxicity test was first recorded by Kahlenberg and True and was applied to psychotic patients by Looney and Macht for the determination of toxicity in depressed patients. The present study deals with the inhibitory effects of defibrinated blood and diluted urine on the growth of the roots of Lupinus albus seedlings, the solutions being
obtained from schizophrenic patients and from normal male subjects. No significant differences were found in the inhibitory action of whole blood between male schizophrenic patients and the normal male controls. Likewise no abnormal inhibitory action on the growth of these seedlings was demonstrable by using a 2 per cent solution of diluted urine. No existing correlation was found with the phytotoxic indexes of the solutions of blood or urine of the patients and their age, period of hospitalization or subtype of schizophrenia.

R. M. S.

[170] Cardiovascular system in schizophrenia studied by the Schneider method. —J. M. LINTON, M. H. HAMELINK and R. G. HOSKINS. Arch. of Neurol. and Psychiat., 1934, 32, 712.

The Schneider test, which purports to afford a measure of cardiovascular fitness, was devised to aid the flight surgeon in judging the degree of physical fitness of military aviators. Its application to 25 members of a hospital staff and to 99 schizophrenic patients gave a score which indicated a significant lowering of physiological fitness in the schizophrenic patient, but the test apparently mirrors the degree of physical activity rather more than the intrinsic degree of normality.

R. M. S.


The main object of this contribution is to report a study of 142 pairs of twins with so-called schizophrenic psychoses in one or both of the twins in each pair. Instances of similar psychoses, quantitative dissimilarity (i.e. dissimilarity of age of onset, particular symptomatology, course, outcome, etc.), qualitative dissimilarity (i.e. one twin having a schizophrenic psychosis and the other some neuropsychiatric condition belonging to a different clinical group) and total discordance (i.e. one twin having a schizophrenic psychosis and the other not affected at all), are to be found among both monozygotic and dizygotic twins, but not with the same relative frequencies. It is suggested that in the aetiology of schizophrenic psychoses hereditary factors seem to play an important part. In themselves they are often inadequate; that is to say, they do not suffice to produce a schizophrenic psychosis. The pathogenic effect of these factors is not highly specific. Others often play a part with resulting dissimilarities of manifestation or total discordance of findings even in monozygotic twins. Hereditary factors are not always present, therefore are not essential in the aetiology of these
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psychoses. A more detailed scrutiny of the material suggests the possibility of separating out from amongst the schizophrenic psychoses a large group of cases which seem to occur on a basis of partial decerebration, mainly of traumatic or infectious origin. A cerebral birth trauma is a prominent factor.

C. S. R.

[172] Concerning the cause of death in certain psychoses.—G. M. Davidsson. 

From his observation and evaluation of data the author concludes that the question of loss of weight as a result of refusal of food by some patients cannot explain the rapid physical failure, since in most cases sufficient nourishment is provided by various ways of feeding; improper assimilation of food may be an aggravating factor. Considering the state of cerebral capillaries, we may perhaps assume that the trophic changes, the rapid bodily decline and fluctuation of temperature are of central origin and due to hypothalamic dysfunction, as suggested by Steck and discussed by Dreyfuss and Scheidegger. The capillary dystonia may account for the fibrosis encountered in various organs and glands, and may perhaps be partially the source of the non-specific histopathology of the brain, viscera and glands. The cause of death in these cases appears to be capillary toxicosis as a result of liberation in the body of toxic substances which are tentatively identified with the H-substances of Lewis. Such toxicosis leads to an extreme opening of visceral capillaries, and also handicaps regeneration of the blood, which together result in arterial oligæmia and consequent cardiovascular collapse.

C. S. R.


Marihuana is the Latin-American name for a cigarette preparation of the hemp plant. The active principle is cannabis sativa. Mental states produced by the drug constitute a fairly definite clinical entity. The drug is a ‘breeder of crime’ only when used by psychopathic types in whom the drug allows the emergence of aggressive, sexual or antisocial tendencies. The clinical pictures observed can be divided into three groups: (1) acute intoxications; (2) emotional reactions to the intoxication features; (3) toxic psychosis due to admixture of drug effects and basic psychosis (manic-depressive, schizophrenic, etc.). Psychological factors are of importance in the emotional reaction of an intoxication, bringing various personality forces and conflicts to the surface. The psychological and physiological effects of cannabis intoxication are: (1) a change in time perception, reality feeling, somatic,
sensory and motor phenomena; (2) disturbance of consciousness with difficulty in memory retention; (3) change in subjective evaluation of perception of visual, tactile, proprioceptive, auditory experiences because of disintegration of sensation to a primitive level of perception. The result of this change in body-model (Körperschema) perception may be expressed in feelings of unreality that appear as panic-states in narcissistic or hysterical individuals; (4) a mood reaction consisting of elevation with periods of sudden boisterous laughter; (5) a primary stimulus to the impulsive life with direct expression in the motor field.

C. S. R.


Some survey of the literature on the subject is made and an illustrative case reported and discussed. Those who feel that this is a manic-depressive reaction still isolate it as a 'delirium mania,' while those who insist that it is of toxic infectious origin also feel that it is markedly different from the usual run of delirious reactions. There is also the tendency to classify the illnes according to the prognosis, those patients who become well being grouped as manics and cases terminating fatally being regarded as infections. Either way the disease stands out as a clinical syndrome. In the author's case the only laboratory finding was a high spinal fluid pressure, the fluid otherwise being negative. Treatment is of interest, as the great excitement causes a strain on the organism. Sodium amytal is especially recommended as a non-toxic drug in order to obtain, if possible, the much-needed rest.

For the sake of clarity in the studying of this group, and until more definite findings are brought forth, it is suggested that these cases be called Bell's mania, after the original observer.

C. S. R.


The type of respiration was examined in 302 patients. Out of 101 schizophrenics, 81 were regular and 20 irregular breathers; out of 101 cases of affective psychoses, 69 were regular and 32 irregular breathers. The meaning of the prevalence of regular breathers among the schizophrenics compared with normal subjects is discussed in reference to former investigations by Golla and Antonovitch; a definite explanation cannot be furnished. The ventilation was examined in 123 schizophrenics and 40 normal subjects. Often the respiration of the former was abnormally shallow and frequent. As to the total ventilation, the shallowness of respiration is mostly compensated, or overcompensated for by frequency of respiration. Sometimes
the mechanism of compensation does not succeed. The alveolar carbon dioxide pressure was, in five of seven cases of schizophrenia, increased; in one case a considerable increase was noted.

C. S. R.

PSYCHOPATHOLOGY


All patients showed profound intellectual deterioration, motor unrest, affective changes and a disorder of speech. The age of onset ranged from 44 to 64. The duration varied from two and a half to 26 years. Certain observations suggested that exogenous factors could accelerate the progress of the disease. An increase of muscle tonus occurred in four cases. Apraxia and visual agnosia were noted in one case and cerebellar signs in another. Symptoms suggestive of vegetative involvement were not uncommon. The chief histological changes were non-specific cell lesions, diffuse cell losses, senile plaques and neurofibril lesions of the Alzheimer type. These alterations showed a considerable degree of parallelism in the cerebral cortex but not elsewhere. The glial response was usually active. Hyaline-like vascular lesions were found in all cases. All parts of the cortex were affected. In most instances parietal lobes, cornu ammonis and temporal lobes presented the severest damage. As a rule there was no close correspondence between the areas of greatest involvement and the individual cytoarchitectural fields. The changes were usually most pronounced in the third layer of the cerebral cortex. The basal ganglia often showed considerable involvement. The differences and resemblances between Alzheimer’s disease and senile dementia and the various theories regarding the origin of the former are discussed. Probably the clinicopathological picture of Alzheimer’s disease occurs in a rather heterogeneous group, the individual members of which may owe their origin to different aetiological agents. A close relationship to senile dementia is suggested.

C. S. R.


Pick’s disease and several theories concerning it are briefly reviewed. With regard to differential diagnosis, neurological and serological findings, encephalograms, and clinical picture and history will usually rule out or confirm such possibilities as general paresis, arteriosclerotic brain disease or brain tumour; but differentiation from Alzheimer’s disease is a more difficult problem. No one symptom or finding is characteristic of either disease; therefore diagnosis must be based on the total findings and the shades of