[34] The faecal flora in catatonic dementia praecox.—Barbara McGinn, Mary E. Raney, and Nicholas Kopeloff. Psychiatric Quarterly, 1933, 7, 260.

Bacteriological examination of the faecal flora of four catatonic dementia praecox patients was repeated monthly for four months. The hydrogen ion concentration, total bacterial count, predominant aerobes and anaerobes, all fell within the limits of variation with the normal. The incidence of B. acidophilus was less than normal, but the character of the flora was fermentative rather than putrefactive. No unusual microbe was isolated with sufficient consistency to indicate that the bacterial flora might be causally related to the mental disease process.

C. S. R.

PSYCHOPATHOLOGY


In this review the old conception that these cases offer a favourable prognosis from the point of view of complete recovery of the mother is by no means confirmed. At Rainhill Hospital insanity with pregnancy (taking no account of puerperal and lactational cases) was found to be comparatively rare, accounting for less than 10 per cent. of total admissions. Ninety-seven cases are here examined. In only 17 cases was there evidence of any psychopathic inheritance, and of these only six recovered. In over 25 per cent. it seemed that some associated disease brought an extra strain to bear and was responsible for the breakdown. Over 75 per cent. were admitted beyond the seventh month, and it would appear that the second half of pregnancy is the time fraught with risks of serious mental disturbance, particularly the seventh or eighth month. The absence of obstetrical difficulties and complications seems worthy of mention. The puerperium, too, was especially free from infective processes. The conclusion was arrived at that a large number of cases were potential psychopaths and would have become insane sooner or later quite independent of pregnancy. Amongst the unrecovered cases (59) there were 12 mental defective, 18 epileptics, seven general paralytics, 12 with dementia praecox, 11 with manic-depressive insanity, two with delusional psychoses, and two with alcoholic dementia. The problem of the correct diagnosis of the cases that recovered exercised the mind of the writer for some time. Most were regarded as confusional (for want of a better title) or manic-depressive and a few had mixed symptoms which did not fit suitably into either category. Nevertheless, the confusional cases did not conform to the usual type. There was scarcely any associated bodily disturbance of any severity and very little reliable evidence of any severe degree of bodily intoxication. With the exception of three cases which improved before
delivery most failed to show any improvement until the second month. For a time after delivery there was an acute exacerbation of the mental symptoms. In six of the cases improvement was deferred until six months had passed, but they then made a full recovery. In the average case, recovery may reasonably be expected about the third month following confinement, and this would make the probable duration of such a psychosis as six months. It is to be noted that in no case was premature labour artificially brought about, and it is thought that there must be very few cases of insanity which either in the maternal or foetal interest require such a step.

C. S. R.


From this study it is concluded that the 'psychopathic personality' is not to be attributed to an organic or functional defect. Psychopathic behaviour or emotional maladjustment is strongly indicative of trial-and-error attempts to utilize the constantly accumulating energy generated in the presence of a stress-strain situation for which the individual possesses no adequate outlet. Consequently, otherwise normal reactions become overcharged with energy and result in antisocial modes of response or else less adequate responses are utilized to relieve the tension state. The fault lies in the type of behaviour utilized rather than in any fundamental physio-organic disorder. Since all social behaviour is learned, there is great hope for the ultimate elimination and prevention of antisocial modes of conduct now designated as 'emotional' in nature.

C. S. R.

[37] Some observations on lipoid metabolism in mental disorders.—J. S. Sharpe. Jour. of Ment. Sci., 1934, 80, 75.

The result of these investigations shows that the lecithin content of the blood in mental disorder exhibits no important variation from normal. The cholesterol content of the blood in early dementia praecox is decreased by about 25 per cent. Later there is an increase by about 30 per cent., as chronicity advances, and it remains at that figure. This may be due to a hyperactivity of the suprarenal glands. The coefficient of utilization is low. In melancholia and confusional insanity the blood cholesterol is slightly on the high side, but the variations are small. The coefficient of utilization is very low in these groups, denoting deficient oxidation and low metabolic activity. Recurrent mania cases show a very high blood cholesterol, particularly during an acute attack. This cyclic nature of the condition seems to suggest some derangement in metabolic activity, probably centred round the suprarenal glands, as evidenced by the blood cholesterol increase. Further, the coeffi-
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cient of utilization is very high, indicating increased metabolic rate. There
exists in the blood in certain melancholic and confusional states a powerful
depressor substance having a choline-like action on the isolated frog heart.
This substance is antagonized by adrenaline. Normally, the depressor
substance is in such small concentration as to be almost undetectable. In
dementia precox and recurrent mania this substance exists in very small
quantities, approaching the normal figure as determined by the physiological
test. Evidence points to a deficiency or absence of choline in melancholia
and confusional insanity. This substance may be conveniently termed
'cholinase.' The clinical feature of these cases is that of hypotonia.

C. S. R.

[38] Studies of blood-sugar curves in mental disorders.—S. Katzenelbogen
The carbohydrate metabolism, as tested by the blood-sugar curves, was
studied in 116 psychotic patients. These included 31 cases of psychoneurosis,
50 cases of manic-depressive insanity (out of which six were manic), 20 of
schizophrenia, and seven cases of organic psychosis. The curves were
evaluated, first, by the intensity of the alimentary hyperglycaemia (following
the ingestion of 50 gm. of glucose); second, by the extension of the glycæmic
reaction over a two-hour period (hyperglycaemic index); and third, by both
the height and extension of the curve combined (hyperglycaemic area).
Abnormal curves were obtained in each psychotic group; in the psycho-
neurosises, 64 per cent.; in mild manic-depressives, 72.9 per cent.; in the
schizophrenics 60.7 per cent., when the curves were evaluated by the climax
of the hyperglycaemia. When estimated by the hyperglycaemic area, the
values were 62.5, 79.2, and 72.7 per cent. respectively; in the organic
psychoses, 100 per cent., judged by both methods of evaluation. The
abnormal curves showed similar characteristics in the four reaction types.
It is believed that the apparently similar disturbance of the carbohydrate
metabolism in the different psychotic reaction types may be related to a
common denominator, that is, affective disorder. Thus, the abnormal blood-
sugar curves in these patients were considered as physiological accompa-
niments of psychobiological reactions.

C. S. R.

[39] Blood and urine chemistry during the specific dynamic action of glycine
in normal subjects and in schizophrenics.—Charles Reid. Jour.
of Ment. Sci., 1934, 80, 379.
After glycine the amino-N content of the blood reached its maximum near
the end of the second hour. Blood urea-N increased slowly and steadily
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during the period of observation. The mean increase in the seventh hour after glycine was about 4·0 mgm./100 c.c., but the actual increase in a particular case appeared to depend entirely on d.uresis and the urea excreted. Blood-sugar decreased about 10-15 mgm. per 100 c.c. after glycine ingestion, but tended to approach the fasting level in the course of six to seven hours. The non-glucose-reducing substances were not significantly altered. The non-protein nitrogen fraction (non-urea and amino-N) of the blood was increased after glycine administration. Nitrogen elimination was much increased also and the excess urea-N excretion during six hours of the post-glycine period amounted to 0·23 of the nitrogen given as glycine. The total nitrogen of the urine (less the amino- and urea-N fractions) was increased after glycine, and this was due either to increased elimination or to increased production in the tissues, or to both. Sulphate excretion was maintained at a higher level than was found for controls during the postabsorptive period. It appeared that the sulphate excretion provided a more reliable index of specific dynamic action than the nitrogen excretion during the period of observation in the experiments dealt with here. The examination of schizophrenics after glycine ingestion did not reveal any striking deviation as to their blood and urine chemistry from those in normal subjects. The character of the mean blood amino-N and urine amino-N curves suggested delay in the absorption of the ingested material as compared with normal. Blood nitrogen and urine nitrogen estimations were not significantly different in schizophrenics from the normals. Approximately the excess urea-N excretion after glycine amounted to 0·21 of the nitrogen ingested as glycine. Sulphate excretion on the whole was less for schizophrenics than for the normals, and this could be due to decreased specific dynamic action in these psychotics or to a diminished absorption rate of the ingested material. Blood urea values in schizophrenics and in normal controls after the giving of 15 gm. urea in 100 c.c. were suggestive of delayed absorption, since the rise in blood urea was slower in the former. Conclusions based on blood urea values after glycine without consideration of the urea excretion are not justifiable. The attempt to demonstrate variations in the specific dynamic action of foodstuffs or glycine by ingestion methods in psychotics is also unjustifiable, in view of the variations in the processes of absorption which have been demonstrated in both normal and psychotic subjects.

C. S. R.

PROGNOSIS AND TREATMENT

[40] Prognosis in manic-depressive psychoses.—Reginald R. Steen. 
Psychiatric Quarterly, 1933, 7, 419.

From a study of 493 cases it is concluded that an individual would be most likely to recover from his manic-depressive attack if he had a normal previous