

ives, but males showed 27 per cent. and females 12 per cent. of grandiose delusions, indicating that these latter are the most common type to occur in general paralysis. The schizophrenic group show a consistently higher percentage of religious and erotic delusions than do the manic-depressives, whereas the grandiose and hypochondriacal delusions show no significant differences. Marital condition had apparently little to do with the type of delusion and age showed nothing of significance except that in persons with schizophrenia delusions were less frequent among the younger. The pre-psychotic personality and intelligence of the patient seemed to show several significant associations with the number and types of delusions. Considerable correlation existed between delusions and hallucinations, the most striking being between persecutory delusions and auditory hallucinations, which show a positive association in all groups except schizophrenic females. The occurrence of a previous attack seemed to have no important effect upon the number of types of delusions for all three types of mental disorder. With regard to alcoholic habits the only important findings seem to be that no delusions occur more frequently in schizophrenic and general paretic males who are abstinent, than in schizophrenic males who are temperate. There was no significant association between the white blood count and delusions.

C. S. R.

### PSYCHOPATHOLOGY.

- [70] **Experimental catatonia in animals and man** (*Catatonia sperimentale negli animali e nell'uomo*).—V. M. BUSCAINO. *Riv. di pat. nerv. e ment.*, 1930, xxxvi, 593.

CERTAIN substances, notably bulbocapnin and somnifen, when injected into animals or man produce symptoms identical with those observed in catatonic dementia præcox and postencephalitic parkinsonism. These substances have the structure of amines and provoke the symptoms by an extracortical action, with a preference for the basal ganglia. This suggests that in the above-mentioned diseases the symptoms may be due to a poisoning by the amine group.

R. G. G.

- [71] **Researches on the action of bulbocapnin in man** (*Ricerche sull'azione della bulbocapnina nell'uomo*).—U. DE GIACOMO. *Riv. di pat. nerve. e ment.*, 1930, xxxvi, 423.

BULBOCAPNIN is an alkaloid extracted from *corydalis cava*. The author conducted experiments of administration by the mouth and intramuscularly, and

then tried its use intravenously, and found that by this method he could provoke a transitory aggravation of the cataleptic symptoms in cases of dementia præcox. He also succeeded in producing a fleeting catalepsy in some subjects (psychasthenic and epileptic) who before the experiment had not shown any traces of such phenomena. In two subjects also there were observed short crises of excitement and loss of consciousness. In view of a comparative analysis of the various phenomena, the author draws a parallel between the syndrome induced by bulbocaphin in man and that of catatonia. The resemblance to the latter is closer than in the case of parkinsonism.

R. G. G.

- [72] **Experimental hormonal catatonia** (Hormonale experimentelle Kata-tonie).—H. DE JONG. *Proc. Kon. Akad. v. Wetensch. te Amsterdam*. 1931, xxxiv, No. 4.

CONTINUING his line of experimental approach to the question of dementia præcox (see this JOURNAL, vol. xi, p. 275), Dr. de Jong has found that adrenalin and acetylcholin, in certain doses, are capable of producing in higher animals a symptom-complex comparable with the motor phenomena of catatonia as seen in psychotic cases. It must be expressly noted, however, that these hormones are not the only substances capable of causing experimental catatonia, but those they are, in point of fact, the sole substances found in human metabolism which as yet have been demonstrated to exercise such an effect. The experiments lend some support to the view that a disorder of internal secretion is causally connected with the development of dementia præcox.

S. A. K. W.

- [73] **Insulin poisoning with acute mental confusion and aphasia as cause of a traffic accident** (Insulinvergiftung mit akuter Geistesverwirrtheit und Aphasie als Ursache eines Verkehrsunfalles).—J. FOG and M. SCHMIDT. *Deut. Zeits. f. d. g. ger. Med.*, 1931, xvi, 376.

THE patient was a young chauffeur of 25 who ran his car with force into another motor vehicle in circumstances where no accident whatever should have occurred. When questioned, his answers were so confused as to suggest alcoholic excess, but of this there was no evidence. Paraphasia and jargon-aphasia were pronounced, and the mental confusion and disorientation complete.

It eventually transpired that he had been suffering from diabetes for some six years, and been treated with insulin for five. On the morning of the acci-

dent, two and a half hours before it, he had had an injection of 10 insulin units, without breakfast, though he took something to eat at the time. Two hours later he suddenly felt hungry and began to eat while driving. Apart from the hunger he had none of the usual insulin symptoms, and could remember, in part, the incidents thereafter. Blood sugar estimated two hours after the accident was  $\cdot 075$  per cent.

Both the aphasia and some of the other psychical symptoms exhibited an intermittent character, and eventually passed off. The authors ascribe the phenomena to hyperinsulinism, and refer to analogous cases from the literature.

S. A. K. W.

- [74] **Anatomical lesions and mental disturbances in disseminated sclerosis** (Le rapport des lésions anatomiques à l'évolution des troubles mentaux de la sclérose en plaques).—J. HANDELSMAN. *Rocznika Psychjat.*, 1931, xiv, 1.

IN five cases out of 29 the author has found marked psychical disorders, as follows: symptoms recalling manic-depressive psychosis; depressive psychosis; mania of persecution, stupor, and auditory hallucinations; cyclothymia accompanied by mania of jealousy and depression; and a syndrome like that of general paralysis. These diverse phenomena occurred in episodic fashion, mainly at an early stage, and some recurred at intervals over a period of years.

Evidence is adduced which goes to show that such mental symptoms, together with those of a milder character but of the same series, vary with neurological symptoms. At later stages a state of psychical passiveness, with puerility and weakening of vital energy in respect of intellectual functions, may be observed.

After a full description of the two main types of histological lesion, acute and chronic, characterising the disease, the author remarks that in his opinion the mental symptoms do not depend on the quantity of such lesions, but on their quality. Mental disorders are apt to develop when, anatomically, recent and acute lesions are to be found. They belong to the type of 'exogenous psychosis' of Bonhœffer; others, however, more or less resemble the organic psychotic syndrome of Bleuler.

S. A. K. W.

- [75] **The cytology of the spinal fluid in general paralysis and its variations after malaria-therapy studied with vital colorisation** (La citologia del liquido cefalo-rachidiano nella paralisi progressiva e le sue variazioni dopo la malarioterapia studiate con la colorazione vitale).—C. UGURGIERI. *Riv. di pat. nerv. e ment.*, 1931, xxxvii, 54.

THE author has examined sixty different fluids with vital colorization. In 48 fluids of parietic patients it is confirmed that in this clinical form of nervous

syphilis, the cells are notably polymorphic and that plasma-cells are always present in a greater or less quantity. In 17 cases examined before and after malarial therapy, it was shown that there was no parallel between the cytological and serological formula of the fluid and the mental condition of the patient. It confirms the importance of the examination of the cytological formula, which can be easily carried out by the method of vital colorization, as an indication of the diminution or disappearance of acute conditions in the meninges and parenchyma in paresis after malarial therapy.

R. G. G.

### PROGNOSIS AND TREATMENT.

- [76] **Some effects of the inhalation of carbon dioxide and oxygen, and of intravenous sodium amytal, on certain neuropsychiatric conditions.**—  
H. C. SOLOMON, M. R. KAUFMAN, and F. D. ELSEAUX. *Amer. Jour. of Psychiat.*, 1931, x, 761.

By means of moving pictures the effects of the inhalation of high concentrations of carbon dioxide and of sodium amytal given intravenously was noted in neuropsychiatric patients. The experiments follow the work of Lorenz who considered that part of the psychotic manifestation of catatonic-like stupor was due to inefficient respiratory activity. In the first case, that of a woman whose diagnosis rested between that of a benign stupor and a catatonic-schizophrenic condition, it was found that after breathing a mixture of 40 per cent. carbon dioxide and 60 per cent. oxygen for two or three minutes, the patient became quite normal in her responses and activity. The period of lucidity lasted for 15 to 25 minutes. Then a confused expression was shown, movements slowed, there was difficulty in memory responses, and soon the original state was regained. It is interesting to note that in the course of a few months this patient began to show a definite improvement. The second case was a catatonic dementia præcox. After the inhalation of the gas mixture the patient was much brighter, talked, dressed himself quickly, made himself neat, and showed lively rational movements. The third one was in the terminal stage of a catatonic dementia præcox. The gas produced violent convulsive movements following which the patient sat up and talked a 'word-salad' replete with obscenity. Two other patients who were suffering from very marked Parkinsonism after epidemic encephalitis and who were unable to get off the bed or walk showed definite change. In both the tremor was first increased but later this was less, and also the rigidity. One could move somewhat and the other was able to get up off the bed and walk about the room. In a patient with a negativistic, mutistic syndrome, an injection of sodium amytal produced marked results. He showed normal expression, talked fairly freely, and was reasonably co-operative. In half an hour he relapsed into his former state.