
Practically all of the motor phenomena characteristic of human catatonia can be duplicated in the higher animals by means of injections of bulbocapnine in doses varying from 5 to 10 per cent. of the body weight. These reactions are dependent upon the degree of development of the nervous system. The most complete results are obtained in mammals, particularly the cat, the mouse, and the monkey. They are only imperfectly developed in birds and in the presence of external stimuli they tend to disappear. No distinctly catatonic reactions were obtained in the lizard, turtle, fish, frog, or salamander. The extent of their production is directly related to the degree of development of the neocortex. Catatonic phenomena appear gradually after the injection of bulbocapnine and the maximum effect is obtained in about half an hour. Similar reactions have been got from relatively large doses of cannabis indica and mescaline. Minimum doses of bulbocapnine produce drowsiness, reduction of motor activity, negativism and catalepsy. With moderate doses the catatonia is most fully developed. Still larger doses are followed by hyperexcitability and hyperkinesis which may terminate in tonic spasms, convulsions and death. These experiments are presented as additional evidence of toxic factors in human catatonia. The reproduction of catatonic phenomena experimentally suggests that toxic as well as psychogenic factors must be investigated before the secrets of this condition can be known.

C. S. R.


The authors conclude that paucity of imagery is very noticeable and this is related fairly closely to intellectual capacity; the higher the intelligence, on the whole, the richer the imagery, but rich imagery does occur in the lower grades. The tendency to description seems to go with higher intelligence but does not correspond to richness of imagery. This would seem indicative of a power to analyze perceptual configurations. The noticing of colour is most frequent in the higher grades but does not occur in the lower grade subjects. There is practically no abstract imagery, the images corresponding to the limited environmental stimuli to which these cases are restricted owing to their poorly developed nervous systems. There is very
little combination of ideas into any sort of composite picture, the images which are perceived being simple configurations. This seems to explain why unfamiliar spatial configurations are more difficult than simple word configurations; also that when directly spatial configurations become complex, their analysis and consequently their manipulation become difficult or impossible. The mental defective, therefore, gives an opportunity of studying the capacity for dealing with the simpler phenomenal perceptual configurations, and further experiments might throw light on how these develop from the anthropoid to the full human level.

C. S. R.


Taking 900 g. as the upper limit for the weight of microencephalic brains, the author has found records of only four in which that was not exceeded and yet no mental deficiency was present ('normophrenia' — an unpleasing hybrid neologism). The case here described was that of a woman of 73, whose brain weighed, with pia, 850 g. It was well developed and well formed for its size (the circumference of the skull was 501 mm.). She was of fair education for her social class and not obviously defective.

According to the author, the brain weight of the case corresponded to that of a six to eight months' old infant. But the important point was established by study of the case, that no arrest of development had taken place as regards the internal structure of the cerebral cortex (both cyto- and myeloarchitectonic).

S. A. K. W.


The supposed association between the melancholic state and extreme perseveration and between the maniacal state and extreme non-perseveration appears to be confirmed by this investigation. But it directly contradicts the association previously claimed between extreme perseveration and the several qualities of character which have from time to time been supposed to indicate introversion. Not only the extreme perseverator but also the extreme non-perseverator tend to lack perseverance and self-control and to be obstinate, unreliable, 'touchy,' and 'difficult.' Whereas the perseverator tends to be 'nervous,' sensitive, effeminate and sentimental, the non-perseverator tends to be inconsiderate, tactless and critical. The moderate perseverator tends to be considerate, harmonious and reflective, the moderate non-perseverator to be courageous, jovial and a 'good mixer.'

C. S. R.

Thirty cases of dementia paralytica in which sclerosis of the cornu Ammonis was found were studied. Of these cases 90 per cent. had shown epileptic phenomena. In none were any noteworthy arteriosclerotic changes found in the cerebral blood-vessels, but the conclusion is drawn that sclerosis of the cornu Ammonis is of vascular origin.

G. de M. R.

The histopathology of the brain in dementia praecox (Istopatologia dell’encefalo di dementi precoci e zolie di disintegrazione a grappolo nel triennio 1929-31).—V. M. Buscaino. Riv. di pat. nerv. e ment., 1932, xxxix, 342.

In a considerable percentage (more than 50) of cases of dementia praecox the cerebrospinal fluid presents alterations generally slight but significant with the ordinary methods of examination. These alterations consist especially of a slowing of the blood-fluid exchange (a diminution of the meningeal permeability and of the rate of reabsorption of the fluid) and in a slight increase of protein without lymphocytosis. This is also reflected in the behaviour of the colloidal reactions. These are much more frequent in the catatonic hebephrenic types than in the paranoid types and in chronic than in recent cases.

For the reasons brought forward in this paper these results are not in favour of the dual conception of the pathogenesis of dementia praecox (abiotrophy and inflammatory) nor of the existence in the great majority of cases of a true inflammation of the central nervous system. They accord however, with the doctrine of a slow disintegration, minute and progressive, of the cerebral parenchyma with an accumulation of waste-products in the circulating fluid.

R. G. G.


The author examined nearly 800 mental cases. Of these, perhaps 2 per cent. were selected, the remainder were routine examinations conducted irrespective of the occurrence of suggestive symptoms. All types of mental disorder were included. The claim is that focal sepsis can predispose to, and exaggerate the development of, mental symptoms; infection in the ear, nose and throat is likely to be particularly potent in so doing. The incidence of such infection in mental disease is considerable (though less than has been
suggested elsewhere); in every case therefore this region should be examined. Drastic removal of septic foci, merely on diagnosis of their existence, is no more to be commended in mental patients than in other persons. But, if other methods fail, such a procedure, carried out in a large number of cases, with adequate control, may become necessary; it may afford the only incontrovertible test of the influence of septic foci in producing and increasing mental abnormality.

C. S. R.


The usual difficulty in obtaining reliable family histories was encountered, but in 85 out of the 160 cases there had been combinations of epilepsy, major mental disorders, excessive alcoholism, and mental defect in the near relatives, usually in the parents or siblings. In 86 family histories there had been epilepsy in the grandparents or siblings. In 86 patients there was a history of excessive alcoholism previous to the onset of the epilepsy or during its course or both. The much mooted ‘epileptic personality’ was alleged to have been present in the preconvulsive lives of 16 of the 160 patients (10 per cent.). In 87 instances the attacks started in infancy and in 15 of the women the earliest seizures were associated with menstruation and the sexual epochs. As regards mental symptoms, 70 cases had outstanding confusion, and sadism was seen principally in this group. Extreme religiosity with mystical ideas was present in 19 instances and paranoid signs in 25. Actual depressive content was seen in only nine cases, which is in keeping with the low rate of depressions among the negroes as a race. Neurosomatic deterioration syndromes as evidence of disorder of the nervous system were demonstrated in 48 cases. Forty-six of the 160 were discharged from the hospital, 24 as improved and 22 as unimproved. Of the 114 remaining patients, 77 have died, 33 with status epilepticus, and the rest with asphyxiation, tuberculosis, pneumonia, cardiac failure, etc. Perhaps the most important feature noted after death was the microscopical brain picture described by Spielmeyer, consisting of a moderate diffuse cerebral neurogliosis with particular focal involvement of the hippocampus, and in addition cicatricial infarcts, minute hæmorrhages into the tissues, increase in rod-cells and neurone degenerations.

C. S. R.

PROGNOSIS AND TREATMENT.


The authors conclude that sodium amytal is relatively non-toxic and offers a wide margin of safety. In their investigation no patient subjected to the