

The author reaches the following conclusions :

(a) Functional pyrexia actually exists. It is to be regarded, however, not as a production of fever by psychical influences, but as a result of morbid affections of the heat-regulating centre in the brain.

(b) The body-weight can vary considerably as a result of centrally conditioned disturbances of the kidneys, and of alterations in the innervation of the muscles.

(c) In hysteria, as in the psychoses, a temporary dissociation may exist between "vegetative" and "psychical" functions. That is to say, both may not be affected at the same time, or one may recover before the other. This is to be ascribed to a non-synchronous lesion of the different parts of the brain concerned.

BERNARD HART.

Dupuytren's Contraction as an Associated Condition in some Psychopathies
[*La contrattura palmare fenomeno concomitante di alcune psicopatie*].
(*Ann. di Freniat.*, vol. xx, fasc. 4, Dec., 1910) Bellini, G.

In this paper, the author records brief clinical notes of twenty cases of insane patients presenting in more or less marked degree the condition of contraction of the palmar fascia. The cases, which were collected from a series of a thousand admissions to the Turin Asylum, belonged for the most part to the more strongly hereditary types of mental disorder. Thirteen of the cases occurred in women and seven in men. In no instance was there a history of injury or of professional occupation involving special pressure on the palm. Almost all the patients presented concomitant symptoms of trophic disorder in the upper extremities—shiny skin, brittle, ridged nails, imperfectly developed muscles, etc. There were also in several of the cases disturbances of sensibility, especially of thermic sensibility. In view of these facts the author suggests that the palmar contraction in these cases is to be regarded as a symptom of syringomyelia, and that the mental disorders are to be attributed to a congenital cerebral deficiency under the dependence of the same degenerative causes that have given rise to the hypothetical fault in the grey matter of the cord. This would be in accordance with the theory of the neuropathic origin of Dupuytren's contraction, a theory which has recently found some support in the investigations of several Italian pathologists. The author hopes to verify his hypothesis when the cases come to autopsy.

W. C. SULLIVAN.

4. Pathology of Insanity.

A Fifth Contribution to the Pathological Anatomy of Infective Chorea
[*Quinto contributo all'anatomia patologica della corea infettiva*]. (*Riv. Sper. di Fren.*, vol. xxxvii, Fasc 1 and 2.) Guizzetti, P., and Camisa, G.

Guizzetti has published four previous communications on the pathology of infective chorea, the last in 1901. In the present instance the authors give the history and the pathological findings in two cases which were fully investigated in the clinique and the *post-mortem* laboratory, and at the same time pass in rapid review the cases

published by other investigators since 1901. In the first case (acute chorea), the macroscopic findings consisted of vegetating endocarditis, aortic, and mitral; bilateral broncho-pneumonia (terminal); congestion of the meninges and of the cerebral substance. The microscopic findings in the nervous system may be briefly summarised as follows: The changes were almost wholly confined to the cerebral hemispheres, and consisted of degeneration of the cortical cells, and more especially of complete chromatolysis of the Nissl-bodies, with accumulation here and there of nuclei in the lymphatic spaces around the cells; severe general congestion with some peri-vascular hæmorrhages, mostly, but not all, of recent date; vascular infiltration and proliferation; ischæmic foci, of rather unequal ages, presenting the various forms of softening and œdema produced by arterial embolism. In the pores were found several hæmorrhages of very recent origin, and regarded as terminal. The spinal medulla was normal.

In the second case (Sydenham's chorea), the gross morbid findings were slight negative mitral endocarditis, not recent; cardiac failure; pulmonary hypostasis and slight œdema; slight recent stasis of liver and kidneys; moderate meningo-encephalic congestion; small hæmorrhages in the pores on floor of fourth ventricle. Detailed examination of the nervous system showed that the changes met with affected principally the hemispheres, then the pores and medulla, and to a very slight extent the cerebellum, whilst the spinal cord remained normal. In the hemispheres were found complete chromatolysis of the cortical nerve-cells; tracts of inflammatory proliferation and infiltration of the peri-vascular lymphatic sheaths, especially of the small veins, and to a less extent of the capillaries and also some arterioles, accompanied sometimes by proliferation of the surrounding neuroglia, which latter change was also to be found without infiltration of the lymphatic sheaths. These alterations were most marked in the subcortical regions and generally in the corona radiata, and were distributed irregularly. They were almost completely absent from the optic-striate ganglia. They were present to a very slight extent in the white substance of the cerebellum. In the pores and medulla the peri-vascular infiltration assumed rather more pronounced inflammatory characters of more recent origin, and also accompanied by true inflammatory centres with small foci of small-celled infiltration distinct from the vessels. These alterations were more marked in the lower half of pores and upper half of medulla on the right side. There were no signs of emboli in the cerebellum or elsewhere. The parathyroid bodies were examined and evidence of increased production of glycogen noted.

In discussing their own and others' findings the authors conclude that endocarditis is an almost constant though not absolutely indispensable feature in the morbid anatomy of chorea. The alterations of the nervous system are always situated in the encephalon, and particularly the hemispheres. The most constant is infiltration with proliferation of the peri-vascular lymphatic sheath. Inflammatory alterations of the pia are probably constant, but always slight and proportioned to the inflammatory changes in the cerebrum. The blocking of blood-vessels, with softening and ischæmic-œdematous foci, is a frequent but inconstant finding. When present it is due to emboli coming from the endo-

cardiac vegetations, although a thrombotic origin, as held by some, is not impossible.

J. H. MACDONALD.

Researches on the Cytological Modifications of the Blood in the Principal Psychoses [*Ricerche sulle modificazioni citologiche del sangue nelle principali psicosi*]. (*Riv. Sper. di Fren.*, vol. xxxvii, Fasc. 1 and 2, 1911.) Graziani, A.

The writer has examined the blood at various periods during the course of sixty-five cases of insanity of various types, and compares his findings with those of other investigators, amongst whom are prominent Bruce and Peebles, Sandri, Dide, Sauna-Salaris, Lepine and Popoff. A clinical summary is given, and the blood-data are tabulated in each case. The numbers of red and of white corpuscles, the ratio of white to red, the percentage of hæmoglobin, and the percentage of the various types of white cells are given, as well as the result of the examination of the fæces for parasites and their ova. The conclusion arrived at is that only in isolated cases of insanity does the blood show appreciable alterations in the morphology or number of the red and white corpuscles, or in the amount of hæmoglobin present. Such alterations as are met with would appear to be the exponent of organic conditions which notoriously alter the state of the blood.

Modifications, sometimes very striking, are often observed in the number of leucocytes and the differential leucocytic formula. These cannot in any case be regarded as characteristic, for the simple reason that the same changes are found with varying constancy and intensity in different forms of insanity. They may be summarised as follows: Polynucleosis, and less frequently leucocytosis, and a tendency towards diminution of eosinophiles in the acute phase of the disease; then diminution of polynuclears down to the normal, or even below normal, with predominance of mononuclears when convalescence supervenes, or when the disease enters the chronic stage.

Intense polynucleocytosis with diminution of eosinophils is a constant finding in acute confusion, and a rarity in other mental affections, so much so that Sandri would regard it as of undoubted value in the differential diagnosis of the acute confusional psychoses from other states, e.g., stuporous melancholia, or an initial confusional episode in a psychosis of chronic course (dementia præcox). Graziani, however, denies the diagnostic value of this finding, inasmuch as he obtained it clearly in some cases of dementia præcox and manic-depressive insanity with marked confusional features.

These hæmatological modifications throw light on the pathogenesis of the mental affections, because they reveal the existence of infective-toxic or toxic processes manifesting themselves in an acute or subacute form, and suggest the notion that the mental affection is only the mode of manifestation of cerebral disturbances arising from a general morbid alteration of the organism.

J. H. MACDONALD.

Colloid Bodies in the Central Nervous System: Their Presence after Severe Traumatism in a Case of Dementia Paretica. (*Journ. Nerv. Ment. Dis.*, March, 1911.) Yawger, N. S.

After reviewing the literature on the subject of colloid bodies and

colloid degeneration, the author states that it would seem in the light of our present knowledge that the so-called colloid bodies may result from traumatism or from an inflammatory condition. It appears that the origin of these bodies is from the myelin of the medullated nerve-fibres, and rarely, from fragmentation of the axis cylinder. The condition of colloid degeneration seems to belong to another subject: here the various vessels are chiefly implicated, sometimes to the extent of ensheathing them.

He then records the case of a coloured patient, æt. 32, the subject of dementia parietica, who died nine months after his admission and twenty hours after having received repeated and severe blows on the head. At the necropsy, made a few hours after death, the usual gross appearances of chronic meningo-encephalitis were found. The brain was placed in formalin and later passed through alcohol. On microscopic examination colloid bodies were observed in great profusion in many parts of the brain, and were found as far down as the pons. They were not detected in the cerebellum and medulla, nor in the half-inch of cord available for examination. They were most abundant in the optic chiasm; the left eye had been dislocated, an occurrence which must have caused considerable traction upon the optic chiasm, and in a brain which had for many months been subject to a chronic meningo-encephalitis, the author thinks that it is not at all improbable that the myelin sheaths were ruptured with extrusion of particles of myelin. The diameters of the bodies for the most part fell within the range of $15\ \mu$ to $25\ \mu$. When viewed through a Nicol prism they showed no polarisation. The reaction with osmic acid was uncertain, and no direct connection between the particles and the nerve-fibres could at any time be traced; they did not stain with iodine, nor were they affected by sulphuric acid; a pinkish hue was obtained with hæmatoxylin. The most intense staining quality was exhibited when toluidin blue or thionin was used. The former gave a deep purple colour, while the latter imparted a distinct amethyst tinge to this substance. After a few days the colour began to fade, and by the end of three weeks it had entirely disappeared from the bodies.

The author thinks that these bodies might have medico-legal value if found after death in cases suspected of cerebral traumatism.

A. W. WILCOX.

5. Treatment of Insanity.

The Processes of Recovery in Schizophrenics (Dementia Præcox)
[*Heilungsvorgänge bei Schizophrenen*]. (*Allg. Zeits. Psychiat.*,
Bd. lxxviii, H. 2, March, 1911.) *Bertschinger, H.*

In mental disorders the personality is invaded, either suddenly or gradually, by complexes or concealed wishes, which acquire the same character of reality as the outside world. The individual may be completely or partially absorbed by such complexes. In the former case he appears completely confused and quite out of touch with