

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

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*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.

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*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 paretica, 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.

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### 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