

2. Neurology.

Influence of the Blood of Maniacal and Melancholic Patients on the Development of the Embryo [*Influence du Sang des maniaques et des hypomaniaques sur le développement de l'embryon*]. (*Rev. de Psychiat.*, March, 1901.) *Ceni, C.*

This paper, a translation from the Italian, records the results of a series of experiments on the development of the embryos of eggs after inoculation with the blood from patients suffering from mania and melancholia.

The intra-albuminous method of Féré was employed, and $\frac{1}{3}$ c.c. of blood-serum injected.

Three cases of mania were experimented with. In the first two cases of mania tried the results were negative; the third case, however, gave entirely different results. In two series of experiments with the serum of this case the first series gave no normal embryo, the second series 6.66 per cent. normal, while the control eggs gave 87 per cent. and 86.28 per cent. respectively; 60 per cent. of the above abnormal embryos showed distinct arrest of development.

The author has noticed this arrest of development in experiments he made with epileptic blood, and considers it due to a toxin in the blood, which has the power to influence development. In the three cases of melancholia tried, two gave negative results; the third case, more severe than the other two, gave 7.67 per cent. of normal embryos, while the control experiments showed 88.7 per cent. normal. The greater number of the above abnormal embryos showed red spots scattered along the primitive nervous axis, most numerous at the cephalic extremity; in most cases the blood circulated normally in these red spots, which were varicosities of the vessels, but some of them appeared to be ordinary hæmorrhages. These spots were shown microscopically to be due to rupture of primitive veins and arteries. The extravasation of blood was found in the mesoderm alone.

Dr. Ceni concludes that some substances circulating in the blood of the patient suffering from melancholia on introduction into the embryo produce weakness of the mesodermal tissues; the blood-pressure then causes the varicosities and extravasations of blood.

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On the Toxicity of the Urine in the Sane and in the Insane [*Sulla tossicità dell'urina nei sani e negli alienate*]. (*Riv. Sperim. di Freniat.*, fasc. iv, 1900.) *Stefani, U.*

This research was conducted with improved technique to eliminate certain errors and to permit of a truer comparison being made. Endovenous injections were used. In the larger series of experiments the urine was either diluted or concentrated to a uniform density of 1030. The rate of injection was also uniform, 1.5 c.c. per minute for each kilogramme. The toxicity was then calculated. The principal results were—(1) lethal action; during the course of any mental disease there were great irregularities in the elimination of toxic substances. These irregularities constitute the true differential charac-