

SELECTED MATTER.

MEDICINE.

ABSTRACT OF A PAPER ON THE VARIATIONS OF THE SULPHATES AND PHOSPHATES EXCRETED IN ACUTE CHOREA, DELIRIUM TREMENS, AND INFLAMMATION OF THE BRAIN.

By H. Beuce Jones, M.D.

Having determined the variations of the sulphates in the states of health when different diets, amount of exercise, and medicines were taken, the variations of the sulphates in disease were examined. At the same time the total amount of alkaline and earthly phosphates was determined, partly in order to see whether the amount of sulphates and of phosphates bore any relation to one another; and partly to test the conclusions which were drawn in the author's previous paper on the Variations of the Phosphates in Diseases. The cases were thus classified:—

1st. Acute and chronic diseases, in which the muscular structures were chiefly affected, as chorea.

2nd. Functional diseases of the brain, as delirium tremens.

3rd. Acute inflammatory diseases of the nervous structures, as inflammation of the brain.

4th. Chronic diseases of the nervous structures.

5th. Acute diseases, in which neither the nervous nor the muscular structures were chiefly affected.

6th. Chronic diseases, in which neither the muscular nor the nervous structures were chiefly affected.

The three last classes gave only negative results.

In illustration of the first class, three cases of most intense chorea are detailed; the urine was examined frequently from the third to the eleventh day. The phosphates were found to be diminished. The sulphates were present in very great excess. The urine was found to be so loaded with urea, that nitrate of urea crystallized out before the urine was concentrated. The specific gravity of the urine was as high as 1036 in one case, 1035 in another, and in the third, 1041.

In illustration of the second class, three cases of delirium tremens are given. The urine was examined from the fifth to the fourteenth day of disease. The phosphates were not found to be so remarkably diminished as in the cases reported in the previous paper. The sulphates were found to be exceedingly increased. The amount of urea was so great, that nitric acid caused an instantaneous crystallization. The specific gravity also was in one case, 1041; in another, 1037; and in the third, 1027. In other words, there was the most remarkable correspondence between the state of the urine in acute chorea and in delirium tremens.

In illustration of the third class, four cases of acute inflammation of the brain are given. The urine was examined from the fourth to the twenty-sixth