

Or the predisposing cause might be any toxæmia or leukæmia. Probably all these theories apply in certain cases, but the exciting cause seemed to be some peripheral irritation, as held by Ohr and others.

Dr. Armstrong thoroughly believed in venesection where there was a distended right heart, and also in cases of high arterial tension, with a hard incompressible pulse, though the surface might be pale. Broadbent had proved venesection to be of the greatest value in this last class of cases. The use of large doses of morphia was undoubtedly useful in selected cases. But he had found bromide and chloral give very satisfactory results as a rule. In regard to chloral killing the child, there was no evidence to show that such ever was the case. On the contrary, chloral was often freely given in tedious prolonged first stages of labor without any injurious effect whatever upon the child.

Dr. Wilkins advocated inducing premature labor in cases where the convulsions appeared to be from uræmia or retention of whatever salt it is which poisons the mother, as he believed it poisoned the child also.

Dr. Alloway remarked that the etiology of puerperal eclampsia was interesting, from the different views entertained by eminent writers. He thought the theory of Lever—reported in the *Guy's Hospital Reports* of 1842—was the one generally accepted at present. Lever had shown that the urine in eclampsia was always highly albuminous, and that pathological changes in the kidneys, corresponding with those of Bright's disease, were frequently discovered. From these facts he contended that eclampsia was caused by the retention in the blood of urea and other constituents of the urine which it was the duty of the kidneys to excrete. The chief objection urged against the acceptance of this theory of uræmic intoxication was that there were patients suffering from chronic Bright's disease who were not attacked with convulsions during pregnancy or parturition. This objection was, however, easily met by the explanation, that if this chronic disease be of long standing the remaining healthy parts of the kidney will still secrete sufficient urine to prevent poisoning, and that eclampsia depended upon uræmic poisoning in consequence of deficient or total suppression of renal secretion. Dr. Alloway also spoke of the well-known Traube-Rosenstein theory, which claims that eclampsia appears when the arterial blood pressure in a highly hydræmic subject is suddenly increased.

In this case acute œdema of the brain is produced, the exudations of serum causing anæmia by compressing the blood vessels. If this condition was confined to the hemispheres it was thought coma would be produced, and if it extended to the motor centres we would get convulsions. The principal objections to this theory were, however, that many young, healthy robust women became eclamptic, and that many hydræmic patients enjoyed an immunity from convulsions. Dr. A. spoke of another class of cases in which the albuminuria is absent during the entire duration of the disease, or only shows itself in very minute quantity for a very short period. Such cases had been called "eclamptiform attacks," caused by reflex irritations of vasomotor and spasmodic nerve centres by a peripheral excitation. According to Brown-Sequard the sciatic nerve plays a most important part in the production of these artificially excited epileptic attacks. Cases have been reported where an over-distended bladder in protracted labor had caused convulsive attacks; also a retained placenta has been accused of being the probable cause. Dr. Alloway drew attention to the recent treatment of puerperal eclampsia by very large doses of morphia, Dr. Glark, of Oswego, being, he believed, the first to practice it. In Dr. Clark's article in the *American Obst. Journal* of July, 1880, upon this subject, he recommended gr iiss and gr ii doses to be administered hypodermically, and repeated on occurrence of another fit. Clark also states elsewhere that it would be absolutely safe to give as high as three grains in same way. Dr. Alloway had used over grain doses in two cases in association with Dr. Rodger with very gratifying results. He had also used pilocarpine, but was not much impressed with it.

Dr. Rodger said he had seen quite a number of cases of puerperal eclampsia, and believed venesection, combined with the hypodermic use of morphia, to be the best treatment. He had been disappointed with chloroform and chloral in these cases.

Dr. Trenholme said the second case reported by Dr. Armstrong possessed some features of special interest. It showed that convulsions in the mother did not destroy the life of the unborn child. It was a question in his mind if the death of a child in the uterus was not generally due to detachment of the placenta, caused by the spasms of the uterus, rather than a vitiated state of the mother's blood. In rare cases it might be otherwise. As to treatment—this would vary with each case—no definite