CASE OF HYDROCEPHALUS IN AN INFANT TEN WEEKS OLD, RESULTING IN RECOVERY.

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THE following case is of interest from two distinct points of view ; its aspect in relation to nomenclature, and its appearance in relation to pathology. According to our received nomenclature, the term acute hydrocephalus is synonymous with tubercular meningitis ; whilst all other forms of cerebral affection associated with effusion, except sun-stroke, are included under the head of chronic hydrocephalus. "Chronic hydrocephalus", however, would not convey a notion of the acute, but non-inflammatory, affection, the particulars of which I am about to detail ; still less would "acute hydrocephalus" express the disorder if a tuberculous disease be thereby understood. I have, therefore, excluded adjectival distinction in giving a name to the case ; which, though it did not, perhaps, pass beyond the stage of congestion, yet properly belongs to the group of cases characterised by watery effusion, to which the term "hydrocephalus" is rightly applied.

Whilst on a visit in Scotland lately, I was one day asked to see a female infant, ten weeks old, who, I was told, had been asleep for twenty-four hours—viz., from about 3 P.M. on one day until 3 P.M. the following day. I found her, about an hour afterwards, not only still sleeping, but almost comatose. Her brow, from time to time, was corrugated and contracted, and she was groaning occasionally. Her skin was warm, but not febrile, and her pulse, which was about 100, was rather feeble ; her bowels were constipated, though shortly before the sleep commenced she had passed some green stools. Her abdomen was tense, but evidence of pain in it was wanting ; and vomiting was absent. The case, in fact, very much resembled spurious hydrocephalus, except that the infant's head was intensely hot, and the fontanelles were bulging and very tense. On inquiry, I learnt that the child had once before had a somewhat similar attack, but of shorter duration ; that the mother was exceedingly delicate, and was unable to furnish sufficient breast-milk for the child's support ; and that cow's milk was obtained with so much difficulty, that Indian corn-flour had been substituted as part of the infant's diet. So profound was the slumber, that I doubted much whether the child would wake again. The feeble pulse at once contraindicated depletion, although the head-symptoms were desperate ; and I merely prescribed a grain of subchloride of mercury to be placed on the infant's tongue, with a little white sugar, and cloths dipped in water or spirit and water to be applied to the head. I also ordered that the calomel was to be repeated. After some hours, the bowels were relieved of a dirty green stool ; and, after twelve hours, the child woke up, and took some milk, but immediately fell sleep again. A second powder was then administered, and the bowels were afterwards moved twice. In about six hours the child again awoke, and appeared much relieved ; the bulging of the fontanelles had disappeared, and the head was no longer inordinately hot ; the skin was natural ; and, with the exception of a feeble pulse and occasional vomiting, the little patient was convalescent. I of course ordered that all farinaceous food should be discontinued ; but the mother's precarious health and the inadequate supply of her breast-milk had to be considered. The mother's means were not sufficient to afford a wet-nurse, and the supply of cow's milk was irregular as to quantity, and only to be obtained in the evening. I therefore restricted the mother's feeding to the day-time, and ordered that the evening and night feedings should consist of cow's milk, diluted with water and sweetened with sugar of milk. The improvement in the child's condition was soon apparent ; but, in a week, the symptoms returned. The sleep of the second attack, however, was not so long continued as that of the first, lasting only from one night until the next, and ceasing soon after the bowels had been relieved by calomel. I saw the child in a third attack, the duration of which was less than those preceding, and it yielded to the same treatment as the former. I recommended the mother to use her powders, not sparingly, whenever the bowels became irregular ; and I have had the satisfaction of learning that the child has not since had any return of alarming symptoms.

REMARKS.—In infancy, the brain is a rapidly maturing organ, and is, in consequence, very liable to hyperæmia ; and this condition may be induced by very slight exciting causes. In this case, the indigestible food which had been given was alone a sufficient exciting cause. The case was clearly not one of arterial congestion ; for, with the exception of heat of the head, febrile symptoms were absent. Neither was there tuberculous ; for not only were inflammation, convulsions, and extreme pain in the head absent, but tuberculous history was altogether wanting.

On the other hand, the external veins of the head were full, and the scalp and face were of a dusky blue colour.

It seems more than probable that, whenever the ingesta irritated, intestinal hyperæmia was set up, and with it portal congestion ; and these together either directly delayed the general circulation by which the brain and its vessels immediately become over full ; or else, from the sympathy between stomach and brain, the moment the former rebelled against the unnatural food put into it, the latter expressed its sympathy by disturbed action, the venous congestion being only a part of a pathology which we are as yet unable to define. The condition of venous congestion is highly favourable to the induction of serous effusion ; and such may or may not have occurred in the case of the child. Possibly the stage of engorgement was not perfected ; the fluid effused being so small in amount that, save for the liability of recurrence, it did not seriously damage the brain. But I am convinced that, if more or less active measures had not been adopted, the child would either have died from the pressure, or by this time have been confirmed hydrocephalic, unless meningitis had supervened, as at one time appeared imminent.

A CASE OF PARALYSIS DURING PREGNANCY.

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CASES of paralysis during pregnancy are rarely met with. Dr. Churchill, after an extensive search in consequence of a case occurring in his own practice, succeeded in finding only thirty-five cases of various forms of paralysis connected with pregnancy ; twenty-three having occurred during pregnancy, and twelve soon after delivery. None of them, however, were of that peculiar form of paralysis which attacked my patient. As far as I can learn, I believe her case to be unique.

Mrs. S., aged 36, stout and robust, and of generally good health, had been married several years and had two children. The death of the youngest, when eighteen months old, caused great grief to the mother ; and soon afterwards (in September 1867) she presented symptoms of early pregnancy—cessation of menses, morning sickness, and enlarged breasts. The sickness increased ; and, in about three months, it generally continued throughout the day. She was naturally very stout, with thick abdominal walls ; and it was partly owing to this that neither Dr. Greenhalgh (who was called in) nor myself could satisfy ourselves by examination that pregnancy existed. Shortly after this the patient began to complain of severe pains in the hands and feet, which soon became excessively sensitive and painful. This condition did not extend above the wrists and ankles. After a few weeks this hyperæsthesia ceased, and was succeeded by anæsthesia. There was also entire loss of motion—in fact, complete paralysis of hands and feet. Dr. Radcliffe was now called in, and, after examination, came to the conclusion that the case was one of congestion of the grey matter of the spinal cord, and that the prognosis was unfavourable. He ordered small doses of ergot, which the patient took for several weeks without, however, any perceptible benefit. In the meantime the sickness disappeared, the breasts became smaller, and the general health improved. Throughout the case there was little or no headache, nor tenderness along the spine : counter-irritation, however, was freely used. The pulse and temperature were nearly always normal. The urine was sometimes limpid and abundant, sometimes scanty and thick with urates, but always free from albumen. The patient's mind was often confused, and her memory impaired. Notwithstanding her protracted illness and thoroughly helpless condition, she was generally in tolerably good spirits. Various tonics, nervine and otherwise, were used ; but the paralysis continued and seemed likely to become permanent. In May, 1868, no perceptible change having taken place, faradisation was commenced, and applied about a half an hour twice a day ; sometimes one pole was held or supported in the left hand and the other applied to the right foot, and *vice versa* ; sometimes one was applied to various parts of the spine and the other to the extremities. At first she could not feel the current in the hands or feet, but above the ankles and wrists she could feel it readily, and the contractions and twitchings of the muscles were easily seen. The remedy was perseveringly applied for increasing periods, and sensation began to return in the hands and feet just two months from commencing it. Motion was much slower in returning. The middle finger of the left hand and the second toes of both feet were for a long time helpless : at length, however, she was able to move them, and her recovery now was nearly complete. In August, 1868 (about eleven months from the commencement of the illness), she was able to walk down stairs without assistance. Shortly afterwards, a very unexpected occurrence took place. Towards the end of August she was delivered of a dead fœtus, of about