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 fevered, 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.

By HENRY M. MADGE, M.D.

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

four months, enclosed in its membranes. The liquor amnii was muddy, but not fetid; and the foetus was of the same dark muddy colour. It had to all appearance been retained in the uterus many months, but had been preserved from decomposition by the liquor amnii. There was very little loss of blood; and the patient made a good recovery.

REMARKS.—Were the symptoms caused by the pregnancy? Ollivier has written a work on this particular form of paralysis. He had seen only one case, and that had no connection with pregnancy. He attributes it, like Dr. Radcliffe, to “congestion of the grey matter of the spinal cord.” Might it not, however, be possible for pregnancy to produce this identical congestion and consequent paralysis? Whatever may have been the cause in my case, I feel indebted to Dr. Radcliffe for having pointed out to me its true pathology. It is evident that there was something more than mere hysterical or functional disturbance. Dr. Churchill is disposed to attribute all cases of paralysis during pregnancy to the presence of albuminuria; but that had certainly nothing to do with the case I have related. With regard to treatment, if it had been possible to prove the existence of pregnancy—assuming that condition to be the cause of the paralysis—it seems plausible enough, that it would only be necessary to remove the cause. In several of the cases, however, collected by Dr. Churchill, the paralysis disappeared during pregnancy without interfering with gestation; therefore, in such cases, I do not know that the induction of labour should be too readily adopted; though, in some special cases, no doubt it would become necessary. The ergot was given on account of its supposed contractile effects on the smaller vessels, thus lessening congestion; but it might also have had some effect on the uterus and its contents. Did the case take a favourable turn because of the death of the child? I hardly think so; because, in several of the cases, the patient recovered from the paralysis before delivery, and afterwards gave birth to a living child. Did electricity cure the patient? This question I am unable to answer; but, in a similar case, I should certainly use it again, for, besides its possible therapeutic effects, it serves to occupy the patient's time and attention, and to introduce a gleam of hopefulness when there is much to cause depression and despair.

INVERSION OF THE UTERUS.

By JOHN THOMPSON, M.D., Bideford.

LATE in the autumn of 1848 I was summoned to the wife of a respectable farmer residing some miles from Bideford, who had been for more than forty-eight hours in labour under the management of a midwife. The presentation was, at first, believed by the nurse to be footling; but at length the hand protruded, and then her error was evident. Finding delivery impracticable, she sent for me; and, on my arrival, I found the foetal arm protruded up to the armpit, and discoloured throughout. The uterine action being very powerful, it was clear that there would be much difficulty in turning the child and completing delivery. After explaining the danger to the husband, and sending for a professional friend in case I should need assistance, I bled the patient to about twenty ounces, and gave her a drachm of tincture of opium. Then, lubricating the back of my left arm and hand, I slid them little by little up the vagina and uterus to the feet of the child. Notwithstanding the bleeding and the large dose of opium, the uterus made such resistance that my hand had to sustain pressure, causing cramp and great pain, before I could effect my object. After about an hour delivery was effected, the child being dead; but the mother was uninjured. The placenta came away without difficulty, and, though there was rather free bleeding, neither exhaustion nor other evil consequence ensued. The arm and hand with which I operated were so much injured that several weeks elapsed before full power and normal feeling were restored. Had I known the full value of chloroform at that time, its administration would perhaps have been substituted for bleeding and opium, and have prevented the punishment I personally sustained.

My patient made a good recovery, and in the next year retained me to again attend her. The presentation in this case was natural; but the placenta was retained, and I had to introduce my hand into the womb to remove it. She was subsequently confined in the years 1850, 1852, and 1853, which shows that fecundity had not been impaired by the severity of her confinements. There was some difficulty in each labour, either a faulty presentation or retained placenta, or the birth was premature; but there is no object in giving details of these cases.

Her last labour was in December, 1853. The presentation was natural; she had arrived at her full time, and delivery took place in a few hours. After handing the infant to the nurse, who then retired from the room, I applied my hand to the abdomen of the mother, but, instead of the usual

uterine tumour, there was a vacuity such as I had never before met with. As I had not attempted to withdraw the after-birth, this seemed strange; nevertheless, believing that inversion of the uterus only occurred where traction had been exercised on the funis, it did not strike me that it could have happened here. On examining the vagina, I found the placenta, and at once attempted its removal. In a few seconds it came away with an unusual sort of plunge as if a coagulum had emerged with it, and I tried to remove the mass from under the bedclothes to the ordinary receptacle, but found myself hindered by a band which appeared stouter than the ordinary membrane, and which was, in fact, the inverted vagina. Lifting the bedclothes, I was astonished to observe the after-birth and womb both escaped together, the latter completely inverted, and having the placenta partially attached. There was no bleeding, nor had much blood come away by the vagina. Promptly taking off my coat, and baring my arm, I first peeled off the placenta—this was done with great facility. No blood flowed from the uterine surface. Then, taking the uterus in my right hand, I passed it up the vagina, and, bending my fist, pressed nimbly against the fundus (my left hand meanwhile supporting the abdomen) and in an instant restored its position. My right hand passed into the uterine cavity, where I allowed it to remain till contraction came on, and it was only withdrawn when uterine action became decidedly expulsive. The patient, during this time, experienced no shock in her system; she lost but little blood, and subsequently made as good a recovery as she had done in any former confinement. Since that time she has not been pregnant, though she has had good general health, and looks ruddy, vigorous, and cheerful.

Two practical views derive support from the facts of this case; the first, that inversion may, and sometimes does, take place without interference on the part of the attendant; the second, that reversion may be readily effected, if the manipulation be prompt and well-directed. Formerly, it seemed to be the opinion of the profession that inversion of the uterus always indicated a faulty interference on the part of the practitioner—perhaps the view now generally held is that this is only the most frequent cause. On this point I may refer to the section on Inversion of the Uterus in Dr. Tyler Smith's *Manual of Obstetrics*, where it is pretty fully discussed. His views are concluded with the remark, that, “Owing to the prevalence of the mechanical idea respecting its origin, obstetricians have often been blamed most unjustly in cases of *post partum* inversion.” The ease with which I restored the displacement was the most remarkable feature in the case; it contrasts strikingly with the distressing failures related in the columns of the different medical journals. The reason for this difference seems to me clearly attributable to the fact of my having acted at once. It is noticeable that in nearly every unsuccessful case the accident has occurred for some time before attempts have been made at reduction—in the majority it could not then be remedied. A reason for delay to procure professional assistance is afforded when, as in the instance I have described, the mouth of the uterus contracted over the course of the uterine vessels and prevents hæmorrhage, but it is to be remembered that this is the very case likely to give the most resistance to reduction if delay be allowed. Dr. S. Merriman, writing in the *Medical Times* of July 12th, 1851, says: “It cannot be too urgently impressed upon the mind that one of two consequences must follow, unless the complete reversion of the uterus is soon effected—either the profuse hæmorrhage will destroy, or the hæmorrhage will be stayed by the contraction of the uterus in its misplaced condition, and this contraction which prevents the further loss of blood, will also render impossible the reversion of the womb.” In the operation for reversion, time seems to be the essence of success. As in my patient procidentia uteri was combined with inversion, the diagnosis was very easy; but had the placenta separated from the womb in the vagina, and left it there inverted, there was nothing about the patient's symptoms that would have indicated so grave an accident. The diagnosis must have rested on the perception of the vacuity in the abdomen, where the uterus is commonly felt. This was so striking that I should, in any future case, instantly have my suspicion on pressing my hand well down on the abdomen. This point derives additional importance from the remembrance that many cases of inversion have escaped detection, and that the question of a vaginal tumour being a polypus or an inverted uterus has, in the chronic condition, puzzled some of our most experienced practitioners. A careful examination through the parietes of the abdomen soon after delivery would probably have decided the matter. It has been stated by Cruveilhier, in opposition to the views of Dr. W. Hunter, that the internal surface of the uterus after delivery is completely denuded of mucous membrane, and left very much in the condition of an amputation-stump. Though this view, coming from so great an anatomist, long obtained credence among a large number of the profession, its truth has of late been questioned; and a paper was read before the Obstetrical Society of London in May 1862, by Dr. Matthews Duncan, in which he contro-