CASE
OF
DESTRUCTIVE OPHTHALMIA,
WITH
EXTENSIVE SUPPURATION OF THE CELLULAR MEMBRANE,
AND
SEVERE AFFECTION OF THE KNEE-JOINT,
OCCURRING AFTER PREMATURE DELIVERY.

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It is presumed that the following case will be particularly worthy of the notice of this Society, whose Transactions contain the most valuable essays on the subject of phlebitis generally, and in which the attention of the profession was first directed, in this country, to the occurrence of certain local diseases in connection with, and probably arising from, inflammation of the veins of the uterus in puerperal women.

In the early part of last spring, I was requested by Mr. Francis Hutchinson, of Farringdon-street, to accompany him to visit Mrs. M——, a lady aged about 40, of spare habit of body, but strong constitution and active mind. She had suffered several previous miscarriages, and had been delivered, on the 7th of March, of a four months' child, which had been for some time dead in the uterus; and it was believed that the system was contaminated by the retention of the decomposed foetus.

Much serious indisposition and constitutional disturbance preceded and followed the expulsion of the foetus, and on the second or third day after delivery, the contents of the right orbit became inflamed. We found that the globe was much

more prominent than that of the other eye, and it was apprehended that an abscess might be forming behind the organ. The cornea, which had lost much of its transparency, was nearly concealed by tumefied conjunctiva of a crimson colour, which distended the palpebræ and added materially to their projection. Leeches and belladonna had been applied, and calomel with opium administered, on account of inflammation of the iris and tunics generally. A few scarifications were made into the vascular and swollen conjunctiva with the view of relieving the chemosis.

At this time the patient became weakened by several attacks of uterine hæmorrhage, which was arrested by the *secale cornutum* and the application of cold lotions. The mercury, which had affected the gums, was consequently discontinued. Quinine was liberally administered with a sustaining diet.

On the 28th of the same month, Dr. Frederic Farre visited the patient, and the following is the account he gives of the affected eye :—"The lids were much swollen and closed : on raising the upper lid, I found considerable redness and chemosis of the conjunctiva, but no suppuration. The cornea was prominent and rather nebulous, so as to obscure the condition of the deeper-seated parts: the following changes, however, were sufficiently apparent,—the anterior chamber was greatly enlarged, the iris was yellow and disorganised from effused lymph, and, inclining backwards, adhered to the capsule of the lens; the pupil was also filled with the same effusion; vision was entirely gone. Considering the eye to be irretrievably lost, I advised the whole treatment to be directed to sustain the system and repress the uterine hæmorrhage, which had returned and was producing great exhaustion; the quinine was therefore continued with a larger quantity of sulphuric acid." In the mean time the right lower extremity became stiff and swollen, pitting on pressure, and accompanied by œdema of the foot and labium of that side.

Collections of matter were also formed in different parts of the limb, at first principally in the vicinity of the knee-joint and under the integument of the back of each forearm above

the wrist ; that on the left arm was dispersed by the application of blisters ; the other subsided spontaneously.

The calf of the leg also became swollen and tense, and fluctuation having been discovered, a large quantity of thick pus was evacuated by an incision. The abscesses about the knee-joint and others in different parts of the limb were opened immediately on being detected ; their contents consisted generally of well-formed pus ; the integuments were not materially discoloured.

It was evident that the cellular, adipose and intermuscular tissues were, at the same time, everywhere loaded with sero-purulent infiltration, presenting, when divided with the knife, a greenish grey colour. The mouth and tongue were covered with aphthæ, which were treated with a weak solution of nitrite of silver and with borate of soda. On the 12th of April, the right knee-joint had become the seat of painful swelling from effusion into its cavity, and its several structures suffered from the effects of the most destructive inflammation. A grating sensation was communicated to the hand when the articular ends of the bones were made to move upon each other, from the probable erosion of the cartilages ; and the facility with which the articular surfaces could be subluxated in any direction plainly showed the extent to which the ligaments had given way. An abscess was opened on the outer side of the joint, and on the 22nd of April Mr. Aston Key opened another above the internal condyle. Mr. Key expressed his approval of the treatment which was adopted, but had little hopes of her ultimate recovery.

May 23rd.—The condition of the patient had now become most deplorable : she was reduced to extreme weakness and emaciation. In addition to her other ailments, she had cough and diarrhœa, and the integuments over the sacrum, and in other parts subject to pressure, became tender. It was suggested that she should be placed upon Dr. Arnott's water-bed, and it proved, throughout the remainder of the treatment, of the greatest service ; indeed, much of the permanent benefit must be attributed to its employment.

The knee-joint, which was considerably bent, had been previously supported, and all motion effectually prevented, by the application of firm pasteboard splints, (the outer one of considerable length,) accurately moulded to the limb. The leg, in which so much suppuration had taken place, was supported by a roller, which served to prevent the burrowing of the matter.

After having been some little time on the hydrostatic bed, from which most essential advantage and comfort were immediately felt, it was ascertained that, in consequence of the pelvis having sunk much below the level of the knee, a very considerable accumulation of matter had taken place, so as to form a projecting tumour at the upper part of the thigh, and it being absolutely necessary, notwithstanding its depth amongst important parts, that it should be evacuated, and that a ready outlet should be given to all fresh collection, it was judged proper to make an opening in this situation. With this view, a slightly curved director, eleven or twelve inches in length, provided with a small button at the extremity, was introduced gently through one of the fistulous openings above the inner condyle: the instrument passed deeply, and took somewhat the direction of the femoral vessels, and, when fully introduced, the extremity, which was too deep to be felt, was ascertained by measurement to have reached within an inch of Poupart's ligament, and near the situation of the anterior crural nerve. The point of the instrument was reached by a careful dissection, and on dividing the fascia an immense quantity of thick pus was discharged. A roller encircling the lower part of the thigh facilitated the further flow of matter through the aperture, which, from the position of the body already described, was dependent. The patient bore her sufferings with much fortitude, and no fresh formation of abscess took place.

From this time may be dated a gradual and steady improvement—the appetite, and with it the strength, increased. The discharge from the numerous and extensive abscesses diminished; the limb regained more of its proper outline,

and the muscles their tone and power. The knee, still considerably bent and distorted, was in a more quiet condition, and successful efforts to extend it were made from time to time by altering the form of the splints, by which it had been constantly supported.

The eye, reduced to a third of its natural size, had receded to the back of the orbit. The external tunics had not ulcerated. All inflammation in the globe and surrounding structures having ceased, the former was speedily reduced by the action of the absorbents to the same dimensions as if the humours had, as in other cases, escaped by ulceration of the cornea or sclerotica. Much deformity was produced by the consequent collapse and falling in of the palpebræ.

On visiting our patient, after an interval of a few weeks, I was gratified to find that she had been gaining flesh and strength, and was enabled to move about a little upon crutches.

The greatest inconvenience which now remained arose from the pain and irritation and the incessant flow of tears, caused by the inverted eye lashes. This was effectually remedied by the introduction of an artificial eye, to which the condition of the atrophied globe was well adapted.

Mrs. M—— is now strong and well ; the knee has become almost straight, but nearly ankylosed ; and some deformity remains from the subluxation of the articular surfaces of the bones,—the tibia being thrown a little outwards, causing the internal condyle of the femur to project. She can support herself upon the limb, which promises to become a very useful one.

This severe affection of the eye in puerperal women, to which the attention of the profession was first directed by Dr. Marshall Hall and Mr. Higginbottom, and the connection between which and inflammation of the uterine veins was first pointed out by Mr. Arnott and subsequently confirmed by Dr. Robert Lee, must, fortunately, be regarded as an uncommon disease, if compared with the other secondary

effects of uterine phlebitis. In the elaborate and instructive tabular view of 160 cases of uterine phlebitis and its effects, published by the latter gentleman, it appears that, out of this number, there is only one instance of consecutive ophthalmia.

In the detail of the case under consideration, the features of which are so extremely marked and characteristic, it is stated that the affection of the eye preceded that of the cellular membrane and knee-joint. It agrees, in most respects, with the cases above alluded to, in the swelling of the lids, the chemosis of the conjunctiva and opacity of the cornea, the formation of pus in various parts of the body, and the extreme exhaustion of the system; but differs from them, Dr. Farre observes, in the absence of suppuration and of ulcerative inflammation of the external tunics of the eye, and in the more decided inflammation of the deeper-seated parts.

Dr. Robert Lee has subsequently favoured the Society with the particulars of three additional cases of this terrible form of ophthalmia, which are recorded in the Twenty-eighth Volume of its Transactions. There it would appear, as in the case now described, that vision was lost in consequence of inflammation of the deeper-seated parts of the globe without suppuration or ulceration of the external tunics. In these, and in all the cases of this formidable disease before alluded to, the results were fatal.

The affection of the joints, which has been more frequently met with, appears to have been attended with almost equally fatal consequences. Mr. Arnott, in his valuable essay on the subject of phlebitis generally, states that Dr. Merriman had not witnessed a single case of recovery amongst the cases of diseased joints that he had seen in puerperal women. It will be remembered to what an extent some of the component structures of the knee-joint had suffered in the case before the Society.

I may be permitted to observe, in conclusion, that I have met with no other instance of recovery having taken place after such severe consequences of uterine phlebitis.