A CASE OF PUERPERAL ECLAMPSIA.

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With Remarks by PROFESSOR BYERS, M.D.

History.—Mrs. M., a strong muscular woman, pregnant for the first time, and expecting her confinement in the middle of June, 1903, was seen by me early in March, when she was in good general health, and her urine free from albumen. Her health continued good till the end of the first week in April, when she first noticed some swelling in her hands, ankles, and eyelids. She then began to be troubled with headache, occasional vomiting, and on the evening of April 14th she could not see to read distinctly. She attributed all these symptoms to the effects of a cold, and did not trouble to consult any one. Next morning she could not see objects in front of her, and was troubled with severe vomiting. Her friends now became alarmed, and were about to send for me, when she was seized with a violent convulsion.

State on Examination.—I saw her at 10.30 a.m. She was then lying completely unconscious, her face congested and swollen, pupils dilated and equal, limbs oedematous, the breathing stertorous, and the pulse full, bounding, and of high tension. She had passed about 2 oz. of dark, smoky urine, which was loaded with albumen. She had five convulsions at intervals of ten to fifteen minutes previous to my arrival. A few minutes later a sixth seizure ensued. Her eyes became fixed and staring, the muscles rigid, breathing arrested, the veins of the neck distended, and the face livid. Then followed clonic spasms affecting the whole body, the breathing started again, and the livid colour of the face disappeared. After the fit the patient remained unconscious.

Treatment.—During the convulsion a piece of wood was placed between the teeth and chloroform given to control the spasms. Sulphate of morphine, $\frac{1}{4}$ gr., was given hypodermically and two drops of croton oil mixed in a little butter placed in the mouth. The patient was then put into a hot pack, and in a short time was sweating profusely. At 11.30 a.m., as the fits were returning every fifteen minutes, another $\frac{1}{4}$ gr. of morphine was given; she was now wrapped up in warm blankets and a diaphoretic mixture administered. There was no return of the convulsions till 2 p.m., when she had another severe seizure. Dr. Austin kindly saw the case with me at 3 p.m., and as the patient was very plethoric, with congested face and full and hard pulse, venesection was done, some 30 oz. of blood being drawn off, and immediately afterwards nearly two pints of normal saline solution were injected. About ten minutes later she showed some slight return of consciousness, opened her eyes, and spoke for the first time since the onset of the fits. As the purgative had for so far failed to act 10 gr. of calomel and 3ss of compound jalap powder were given. She remained partly conscious for about an hour and a-half, then lapsed gradually into a state of complete unconsciousness, accompanied with stertorous breathing. At 7.30 p.m. she had her thirteenth convulsion, which was again controlled by chloroform. At 9.30 p.m. Professor Byers kindly saw the case in consultation with Dr. Austin and myself. The patient had passed no urine all day, and the bladder was empty. The cervix was now beginning to dilate, and as the condition of the patient was not improving it was decided to end the pregnancy. Professor Byers dilated with Bossi's dilator, and delivered a feeble 7-months child with forceps. The child lived for a few minutes. The patient had no return of the convulsions after delivery. Next day, though feeling dazed, she was quite conscious, could see a little better, and was passing water freely. The puerperium thereafter was normal, and on April 23rd, though the urine still contained a little albumen, the patient felt quite well, could see distinctly, and was apparently nothing the worse for the loss of blood.

REMARKS BY PROFESSOR BYERS.

The above case, the details of which have been carefully recorded by Dr. McDowell, illustrates well a type of puerperal eclampsia very difficult to deal with; that is, one in which the convulsions begin before the onset of labour, and in which, in spite of every care and attention, the patient gets worse. She had been treated with purgatives (croton oil, calomel, and compound powder of jalap), diaphoresis (hot pack, and a diaphoretic mixture), morphine, chloro-

form, venesection (30 oz.), and saline transfusion (nearly 2 pints); and when I saw her she had gone through thirteen convulsions, and was lying in a comatose condition with a quick pulse of 120. Under anaesthesia, I found that the head had not entered the pelvic inlet, and the os, which was soft and dilatable, would only allow the introduction of one forefinger. We decided, under the circumstances, that our best course was to induce labour, which I did by dilating the cervix with Bossi's four-bladed steel instrument. This was done under chloroform anaesthesia, and only twenty minutes elapsed from the time I introduced the instrument until the os and cervix were sufficiently enlarged to allow the use of the axis traction forceps. Within less than an hour from the time I saw the patient the child was delivered. The above case adds another to those already recorded in the BRITISH MEDICAL JOURNAL in which Bossi's dilator has been of the greatest service in rapidly and safely inducing labour in a case of eclampsia eminently calling for this plan of treatment.

ON INFLUENZAL ORCHITIS:

WITH THREE CASES.*

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ALTHOUGH cases of orchitis have been reported from time to time as dependent upon influenza, I do not think the relation of inflammation of the testis to this widespread epidemic, influenza, is very generally recognized or understood. It is possible that as different epidemics appear to assume special types, so at one time the testis may be more prone to be attacked than at another, according to the tendency of a special epidemic. As in the case of mumps, the severity of the original disease may bear no special relation to the subsequent sequelae, and therefore this relation is liable to be overlooked in endeavouring to trace the course of an orchitis. When an epidemic of mumps is raging boys may be attacked with orchitis without showing any signs of parotitis, and as influenza has few characteristic features save its sudden and short-lived fever, the relation of an orchitis to an influenza becomes more difficult to trace than the dependence of a similar inflammation upon mumps. By some curious coincidence three cases of orchitis, two of which were certainly and the third was almost certainly, caused by influenza came under my care in Lazarus Ward, Guy's Hospital, in November and December of last year.

The first case was that of a married man who had a severe inflammation attacking each testicle in succession following upon an attack of influenza. The other two cases were in boys, one aged 8, and the other $3\frac{1}{2}$ years.

These three cases, all occurring within a few weeks during the severe autumn epidemic, led me to suggest that perhaps in certain epidemics the tendency to testicular complications may be more common than in others, just as in certain other phases the catarrhal, nervous, or intestinal symptoms may predominate.

I have spoken of the inflammation as an orchitis, and though the body of the testis was certainly enlarged and tender, the epididymis in each case appeared to be more severely attacked, was greatly enlarged and excessively tender. The scrotum in two of these cases shared in the inflammation, being thickened and brawny, intensely red and also tender. A certain amount of fluid also was noticed in the tunica vaginalis. The acuteness of the symptoms was the same in these two cases, being at once obvious from the redness and infiltration of the scrotal tissues, thus differing from those cases of subacute epididymitis often noticed during catheterism or gleet, when the epididymis enlarges without implicating the subcutaneous cellular tissue. In the other case the scrotal tissues were not inflamed. So severe was the inflammation in the man's case that one can well imagine, if such a complication were to attack a person suffering from some serious general condition as diabetes or Bright's disease, supervening upon the depressing influence of the influenzal fever, suppuration or sloughing of the scrotal tissues might take place. This actually took place in the case of an old gentleman aged 70, residing in the West of England, concerning whose condition I was consulted last year, and for whom I recommended a consultant from Bath. He had both glucose and albumen in his urine, and after

* Read before the South-Eastern Branch of the British Medical Association.

suffering from influenza and pneumonia one testis became acutely inflamed and went on to suppuration. He, however, made a good recovery.

It might be an interesting question to discuss in what way the organism of influenza reaches the testis and excites inflammation therein.

This organism has a special proneness to attack mucous surfaces, and, being carried through the kidneys into the urine, may act on the urinary tract and spread by the common ejaculatory duct and vas deferens to the testis. In this case the epididymis would be the part first and principally attacked. On the other hand, when circulating in the blood, it may be carried to the capillaries of the testis, and be there lodged, so as to excite the inflammation spoken of. It will be noted, when I give the details of the man's case, that he had considerable irritability of his bladder and urethra, and his case strongly suggests that the inflammation spread from the urethra to the testis. It may not, perhaps, always follow the same route, but the fact that in all my cases the epididymis showed very definite enlargement, and that the inflammation spread readily to the surrounding tissues, would appear to favour the view that this was the course in each case.

CASE I.—E. W. K., aged 31, a gardener, was admitted into Lazarus Ward, Guy's Hospital, under my care on November 13th, 1902, suffering from an inflammation of the testis.

History.—He was married, and had had two children. There was no history of gonorrhoea, syphilis, or tubercle. He first suffered from influenza four years ago, and was very nervous afterwards. He suffered from indigestion, and lost most of his teeth from decay. The stumps were extracted and replaced by a set of false teeth, since which time he has improved in health. About nine weeks ago he had a second severe attack of influenza with high fever, and was laid up in bed. He then noticed a frequent desire to micturate and an irritable sensation in the urethra in passing water. Next he says a little blood appeared at the beginning and end of micturition. This improved at the end of a week, when he had a sudden onset of pain of a severe character in his right testicle. This gave him agony for thirteen hours, till the doctor injected morphine subcutaneously, and supported the testis on a pillow. The right testis became much swollen, and the pain extended along the cord into the groin and back. He lay in bed for a month, and then was convalescent for about three weeks. He then, on November 6th, commenced work, but was immediately seized with a return of his former symptoms—irritability and frequent micturition, a little bleeding from the urethra, and acute pain in the left testis, which became rapidly inflamed and swollen. Drs. Holman and Bailey of Midhurst, under whose care he had been, communicated with Mr. Lucas, and he was admitted into hospital on November 13th.

Condition on Admission.—The patient appeared to be a healthy, ruddy countryman, but of a nervous temperament. There was no evidence of any discharge whatever from the urethra. The urine was specific gravity 1015, acid, straw colour, free from blood, albumen, and pus. The left side of the scrotum was inflamed and the left testis enlarged. The body of the testis was somewhat swollen but the epididymis was distinctly enlarged, especially the globus minor. There was evidence of a little fluid in the left tunica vaginalis. Examined per rectum the prostate was felt well developed, smooth, and normal. Some evidence of the old inflammation of the right testis could be detected in slight remaining enlargement of the right epididymis. The scrotum was raised on a pillow and mercury and belladonna applied locally to it. Under this treatment the inflammation rapidly subsided and the pain disappeared. On December 2nd, 1902, the swelling had entirely gone, and he was discharged wearing a suspensory bandage for the scrotum. During the time he was in the hospital his temperature never rose above normal, and no blood or other abnormal constituent was found in his urine.

When cross-examined as to the cause of the blood in his urine, he admitted that on both occasions it occurred as the result of sexual congress, when he believed himself to be convalescent. I have known this condition to be produced under similar circumstances after epididymitis from other causes, and I have known patients to complain that their emissions were stained with blood so as to colour their sheets for some months after epididymitis of gonorrhoeal origin. The haemorrhage is therefore to be regarded only as an expression of the congested state of the genital passages under inflammation excited to capillary oozing by the act in question. The other two cases were in boys, and one testis only was attacked in each patient.

CASE II.—H. W., aged 8, was admitted into Guy's Hospital, under my care, on November 16th, 1903, on account of double rupture and swelling of the left testis.

History.—He was one of three children, both parents being alive, the father healthy, and the mother said to be consumptive. There was no history of gout or rheumatism in the family. His elder sister was suffering from pneumonia after influenza. When 14 months old he was noticed to have an inguinal hernia on each side. He was then brought up to the hospital, and, having phimosis, was circumcised and a truss applied. When 2½ years he was again brought up on account of the ruptures, and dis-

charged three days later. He had left off the truss for some weeks before his admission, and the herniae generally went back when he was lying down. He had been laid up with an attack of influenza for about a week before his admission. He then began to complain of pain and tenderness in the left testicle, and had vomited three times, on account of which symptoms he was admitted into the hospital.

Condition on Examination.—When seen, he was a pale, delicate-looking boy. The inguinal herniae were not down, but the left testicle was considerably enlarged and tender. He referred the pain to the front of the testis, and had a vague sort of ache or pain running up into the abdomen. The skin of the scrotum was normal, but the body of the testis, epididymis, and cord were all enlarged and tender. He was kept in the hospital for three days, and then sent home to rest till the inflammation of the testis had subsided. Subsequently he was readmitted and a radical cure performed on each hernia.

It will be observed that in this case the orchitis followed directly upon the influenza, as in the first case related, and that the pain was sufficient to excite vomiting, which led the parents to bring him to the hospital to ascertain whether this symptom and the swelling had any relation to the hernia that had existed from infancy.

Had he been wearing a truss the epididymitis might possibly have been caused by the pressure due to the instrument, but the double truss had been discarded before the inflammation of the testis commenced. The orchitis was less acute than in the man's case, and the tissues of the scrotum were not inflamed in sympathy, as in his case. The organ had quite resumed its normal size when the boy was readmitted for the radical cure of his herniae.

The absence of any other exciting cause, such as mumps, and the occurrence of influenza in other members of the family at the same time that the boy was attacked, led me to regard the influenza and orchitis as cause and effect.

CASE III.—C. G., aged 3½, was admitted into Lazarus Ward, Guy's Hospital, on December 14th, 1902, for inflammation of the left testis.

History.—He was the son of a neighbouring publican, who was rheumatic and had had haemoptysis. When six months old he was noticed to have a left-sided inguinal hernia for which a truss was applied. The hernia had not been down since he was twelve months old. On December 11th the child complained of pain on the left side of his chest, and he had suffered for some days from a cold. On December 13th it was noticed that the left testis was swollen and that the skin of the scrotum was red and inflamed. There had been no mumps in the neighbourhood, and there was no evidence of parotitis or enlargement of any of the salivary glands. The friends were inclined to attribute the inflammation to his having been picked up roughly.

Condition on Examination.—On admission he appeared to be a healthy-looking boy. The left testis was considerably swollen, and the scrotum red, tense, and inflamed. It was exceedingly tender to the touch. The swelling was most evident at the lower and back part of the testis. The cord could scarcely be felt, owing to the distension. For the same reason the scrotum was tender all over, and on both sides, but the right testis was not similarly affected. Warm boracic fomentations were applied over the inflamed scrotum, and he was kept in bed. On December 17th he was better and the distension less. An ointment of mercury and belladonna was then applied. He was discharged on January 2nd, 1903, the inflammatory swelling having completely disappeared.

The acute inflammation which occurred in this boy's case closely resembled the acute inflammation, with redness and oedema of the scrotum noticed in the case of the man; and though we had no more definite history of influenza than that the boy had been suffering from a cold and pain in his chest, considering the prevalence of the epidemic at this time, I am inclined to think that we were right in thinking this cold an influenza, and the orchitis secondary thereto.

One can scarcely imagine so acute an inflammation to be caused by roughly picking the child up. Had it been caused in any such way, some evidence of bruising or injury would probably have been noticed; but of this there was not the slightest evidence. It was an acute inflammation of both the body and epididymis of the left testis, extending through to the scrotum, causing oedema and redness of the superficial tissues. Apart, then, from any other epidemic influence known to produce orchitis, it is fair to assume that the inflammation bore a relation to the prevailing epidemic of the time of which the little boy had shown signs, rather than that it was an idiopathic disease, or due to traumatism, of which there was no evidence.

From these cases it will be gathered: (1) That inflammations of the testes may occur as the result of influenza following close upon the fever; and that after one testis has recovered the second may be attacked. (2) That when there is an epidemic of influenza in the neighbourhood, sporadic cases of orchitis probably occur as the result of the influenzal organism, though it may be difficult to trace the relation of the orchitis to the preceding infection.