

Cases of Puerperal Convulsions. By JOHN P. LITTLE, M. D.,
Richmond, Virginia.

THE following cases were met with whilst I was a country practitioner in Orange county, Virginia.

In forty-five cases of labour, three cases of this formidable disease occurred: these are reported in the order in which they presented; and to them is added another case, illustrating the power of the human system to resist without apparent suffering, or even sympathy, the delay and danger of a protracted and difficult labour.

CASE I.—A young, strong negro woman (servant to Mrs. Roach, of Orange Co.), pregnant with her first child, was seized with a convulsion early on the morning of the 15th of April 1847. I reached her at sunrise, an hour after its occurrence, and found her lying unconsciously, breathing stertorously, her pulse full and hard and the pupils dilated. She could be roused with difficulty, and answered at random a question asked her. A violent convulsion seized her as I sat beside her bed; it was preceded by the usual symptoms of uneasiness of body, rolling of the eyes, irregularity of the pulse, &c.; the face became distorted, the eyes turned up, foam flew from the lips, and the whole muscular system was violently convulsed. Immediately the arm was tied up, and as soon as the convulsive efforts allowed it, a vein was opened by large orifice; the amount of blood was not measured, as effect alone must regulate the amount of bleeding in such cases; she was bled into a state of semi-consciousness. Antispasmodics and purgatives were administered. The mouth of the womb was open, as in the commencement of labour; the lips thick and rigid, scarcely if at all dilated under the contractions of the womb. There was every prospect of a difficult, tedious, and dangerous labour. Another and another convulsion appeared, with a shorter interval as the labour slowly advanced; between them she lay comatose.

Every means was used to relax the mouth of the womb, to hasten the labour, and to avert the danger to the system from the shock of the convulsions. Warm fomentations; dilatation with the fingers; bleeding largely twice repeated, according to the indications of the pulse and the convulsion, and each time with good effect.

The free depletion by venesections and purgatives mitigated the severity, yet the continuance of the labour increased the frequency of the convulsions.

The head, a very large one, was impacted in the superior strait; the os uteri although rigid was somewhat open; the womb was acting strongly and the woman in convulsions. I decided to open the head, and deliver as rapidly as possible. Dr. Graves being called in consultation and agreeing with me, I proceeded to deliver; placing the woman in the usual position, the head was opened and as much as possible of the brain removed; then, compressing the bones of the cranium, with much difficulty the body of a very large foetus was withdrawn.

A violent convulsion occurred during the delivery, and another preceded it; making in all ten violent convulsions during the twelve hours that elapsed from the occurrence of the first one to the delivery. The womb seemed to have exhausted itself; it remained relaxed, and hemorrhage came on; by stimulating the womb and by injection of infusion of ergot this tendency to flooding was overcome; not, however, until she had lost much blood. I hoped

that with the delivery the convulsions would cease; as another fit occurred, and she still lay comatose, I shaved the head and cupped freely the nape of the neck; the blood flowed very freely from the scarifications.

She passed the night in a comatose condition; symptoms of another fit showing themselves, and the pulse justifying it, she was again bled on the second day of attendance; on this occasion she flinched from the lancet. Her head was now covered with a blister (one had after cupping been applied to the nape), and after it had freely drawn, as she still lay in a state of stupor, a warm poultice was applied over the whole scalp, having previously clipped the blisters and covered the poultice with spirits of turpentine. This was done on the afternoon of the second. She exhibited symptoms of uneasiness at this application; yet it was not until suppuration had been freely established over the whole scalp (although antispasmodics and purgatives with diuretics had been freely given and with effect), that she, on the morning of the third day after her delivery, opened her eyes and appeared conscious. She was not able to speak, yet made known by signs that she wanted drink and food; it was most singular to see her eye and gesture asking to satisfy her appetite, yet possessing neither speech nor hearing. As there was still a tendency to stupor, and as all the faculties had not returned, the applications to the head to encourage suppuration were still kept up.

Speech and hearing and intellect gradually returned; in the course of four or five days she could give some account of herself; and I found that she was utterly unconscious of all the circumstances connected with her labour. The lochial discharge was encouraged by warm fomentations and attention to cleanliness. She made a rapid and perfect recovery; and, undeterred by the failure and danger of her first experiment, has since borne with safety to herself living children.

In reviewing the case, I regret that I did not cup earlier, and apply cold to the head; it should be done in all such cases. Of the quantity of blood lost I cannot speak accurately; she was four times bled, there was hemorrhage, and a very free cupping on the nape. The venesections were regulated according to effect, and not according to quantity; and this I esteem the only safe rule of guidance in similar cases.

The two other cases occurred in women who had each borne many children. They had been accustomed to be bled freely during pregnancy, by way of removing hyperæmia; and the bleeding had been either very slight, or altogether omitted before their last labours.

CASE II.—A servant (40 years of age, pregnant with her twelfth child, in whom from a tendency to anteversion of the womb her labours had been more and more difficult), was taken with convulsions March 14, 1848.

Her situation not being known, as she lived some distance from her master's house, she lay twenty hours in this condition, having convulsions, and lying comatose between them. I saw her in the tenth, and immediately opened a vein, drawing off some three pints of blood. The convulsion ceased, yet not even semi-consciousness returned. The bladder and rectum were emptied, cathartics were administered, and the head elevated and kept cool.

On examination, the mouth of the womb was found tilted backwards in the upper part of the vagina, and very slightly open. With some difficulty it was brought down, and by assisting each pain, gently opened with the fingers; the head presented, the occiput placed towards the left sacro-iliac junction; the

head was then pushed up, one knee seized, and delivery effected by turning; the child was dead. This was not accomplished until several convulsions had occurred, and a second bleeding, not so large as the first, had been made. She lay comatose; and with the exception of one convulsion after delivery, remained so for two days, and then died. In this case also the scalp was shaved and counter-irritation used. Serious mischief had resulted from absence of medical aid in the commencement, and no subsequent treatment could remove it.

CASE III.—Mrs. Jacobs, of middle age, the mother of several children, a woman of strong constitution and robust health. After a few days' indisposition, she was taken with convulsions July 14th, 1849. A physician being called in, she was freely bled, and on their return was again bled.

I was called in consultation on the morning of the 16th; she was then in a convulsion, which made the eighth during the two days of attack. I instantly tied up her arm, and bled freely, until a state of consciousness returned, and she could answer my questions.

On examination, the mouth of the womb was found slightly open, and the head presenting, yet no contractions of the womb were perceived.

She lay as one sleeping heavily, yet could be roused with difficulty. My advice was to stimulate the womb to contract, by dilating the orifice with the finger; if this failed, to use ergot by injection, and to rupture the membranes, turn, and deliver. I have always found it safer to use ergot in this manner than by the mouth; it does not disagree and cause vomiting, and its effects can be obviated by washing out the rectum, if considered necessary. My plan is to give by the rectum the dose usually given by the mouth, repeating it as the indications require; and when given in this manner it appears to excite rather the alternate contractions of the womb, than that peculiar tetanic action following larger doses. Its effects may be guarded by opium given with it; which, while it does not appear to affect the womb's contractions, mitigates the severity of pain. In this case the contractions came on regularly, the membranes were ruptured, and my colleague, losing the opportunity of turning, allowed the head to descend.

The woman, conscious of pain, though not of the cause, struggled and complained. Her pulse rising, and symptoms of convulsions appearing, I reopened the vein, and allowed blood to flow until they ceased, and she became conscious. The contractions came on with force, the instinct of labour seemed to lead the woman to cease her uneasy struggles, and to bear down until delivery was accomplished by the expulsion of a dead child; a tendency to flooding was manifested, and checked by pressure, by injections of ergot, &c.

Her convulsions had not been powerful, and her comatose condition not complete, as she seemed conscious after delivery. I left her in the hands of the attending physician. Convulsive action, however, came on, and stupor, although purgatives and diuretics had been employed; I had the head shaved, blistered and poulticed as in former cases; consciousness returned when the scalp was pouring out serum, and remained. In the four bleedings in this case, half an hundred ounces of blood were lost. There was in none of these cases the profuse perspiration that usually accompanies labour; the want of free sweating is said to be one of the accompanying symptoms of the disease.

CASE IV.—A young healthy negro woman (servant to Mr. Hudson, of Culpepper Co.), pregnant with her first child, had been in labour three days when I was summoned in consultation. June 8th, 1847. I found her lying perfectly free from pain, pulse natural and skin cool; without any apparently

bad symptom except the continuance of the labour; the head presented; the membranes were long since ruptured, and the perforator had been used to pierce the head. I first gave ergot by injection, to cause contraction and prevent flooding in delivery; and then broke up the brain and delivered a very large boy. In spite of the ergot, flooding showed itself, and it was necessary to introduce the hand into the womb, turn out the clots, and make pressure within and without; contractions came on and with care were kept up.

The bladder was found enormously distended; the urine had been accumulating during the whole time of labour. So long-continued distension produced atony; and it was some time before the use of the catheter, and of that class of diuretics which act especially on debilitated fibre, as buchu, tinct. cantharidis, &c., could be dispensed with.

She recovered slowly, yet without a bad symptom. I should have supposed this a case where convulsions, or some severe consequent of labour, might have been expected.

Puerperal convulsions or eclampsia is attributed to many causes; to congestion of brain; to irritation of spinal cord, or of excito-motor system of nerves, either directly or sympathetically; to pressure made on sacral nerves, or to toxæmia, caused by pressure of gravid uterus on kidneys, preventing secretion and elimination of urea, and producing a poisonous state of blood.

The most satisfactory opinion to my mind is that its primary cause consists in the hyperæmic condition of system which belongs to pregnancy.

That the contractions of the womb, and the pains of labour, react sympathetically on the nervous centres, causing an increased flow of blood to those cavities, thereby producing convulsive action, and its consequence, stupor. That the presence of the fœtus in utero is, therefore, the proximate cause of convulsions. And that the most judicious plan of treatment consists in the early and free use of the lancet (used according to effect alone), and then in accomplishing the delivery as rapidly as is consistent with the safety of the mother. That, as incident to this treatment, should be used free evacuation of the bladder and rectum; cold to the head; cupping to the nape of the neck; and if the uterus become flaccid and inert, an enema of sp. turpentine, or of ergot, may be administered; the latter especially if hemorrhage be feared.

That if the state of stupor continue after convulsive actions have ceased, counter-irritation over the whole scalp, and even suppuration should be brought on.

Opium has been recommended in large doses by Dr. Robert Lee, and by Dr. Meigs, after free blood-letting, to calm the sympathetic excitement of nervous system.

In none of these cases did I dare make use of it; in fact, the tendency to cerebral congestion and effusion is so great that I should hesitate to use it, and certainly not until the delivery had taken place, as the continuance of parturition would keep up the tendency to convulsions.

The opinion of Burns, that pressure on the sacral nerves is one cause of

convulsions, should have weight enough to cause frequent change of position for our patient. And the proof advanced by Cormack and Simpson of Edinburgh, that albuminous urine accompanies puerperal convulsions; that urea exists in the blood; moreover, that in all such cases there exists very little perspiration, by which elimination of poisonous matter might take place instead of by the kidneys; this is sufficient to justify the use and explain the benefit of diuretics and laxatives in all such cases.

The disease may be averted by preventing its causes; and when it has made its appearance, if not early closely attended throughout, and properly treated, may be considered a disease very much under our control.