

we can expect to lose the *consequence*—that is, the conjunctival inflammation.

In most cases, indeed, this is done, sooner or later, by our routine treatment for struma—by those medicines and by that system of diet which tend to invigorate the system and assist the recuperative powers of nature; but certainly later, and with more damaged vision, in proportion to the amount of local violence we employ, to the activity of our irritating applications, and, above all, to the extent of the lowering and depressing system we may be tempted to adopt by the name “inflammation.”

The relief of the hyperæsthesia, however, may, I believe, be greatly hastened, and the inflammatory symptoms held in check or prevented from leading to corneal mischief, by the use of belladonna, a medicine which would seem to be physiologically indicated from its effect on the iris and on the nervous system generally. The use of belladonna in this affection is by no means novel, though often overlooked. Prof. Koreff assured Mr. Middlemore* that he had “witnessed the most surprising benefit in the photophobia scrofulosa from the internal administration of belladonna.” Baron Dupuytren, too, states that “inflammation of the retina, which very frequently attacks scrofulous children, and is characterized by horror of light, may no doubt be treated by bleeding, leeching, purgatives, setons, &c.; but experience has too often convinced me of the insufficiency of these means, and has consequently led me to seek for others. That which during ten years has succeeded best is the internal use of the powder and extract of belladonna.”† The Baron’s theory as to the existence of inflammation of the retina I believe to be erroneous, but the testimony to the beneficial effects of belladonna still holds good.

In the case to which I alluded in the beginning of this paper, I administered belladonna internally on the first occurrence of the photophobia, and under its use no inflammatory symptoms ever made their appearance. The health was kept up by tonics, and the eye (as well as the foot) was finally restored to a healthy condition.

Where the amount of spasm is not very great, and local applications can be employed without undue violence, atropine can be used directly to the conjunctiva itself, and the more readily if applied at night-time, when the spasm is at its minimum. In other cases, however, the eyelids cannot be separated without undue violence; so that it is often expedient, when we wish to examine the eye, to administer chloroform, which not merely enables us to “take stock” of the amount of local mischief, but even exercises a certain amount of curative action by its anæsthetic properties. In such cases the belladonna may be given internally, alone or with tonics, but it must be given in really large and increasing doses until the patient is fully placed under its influence.

One of the worst cases I ever saw, a patient in the Hospital for Sick Children, who had resisted, whilst under my care there, improved diet and all routine treatment, was placed by my colleague Dr. Jenner, whom I had requested to take charge of him, under very large doses of belladonna. In no long time the boy was running about the ward with his eyes wide open, instead of lying in his bed, with his head buried in the clothes, howling if touched, and his face perfectly disfigured by contact with the profuse and scalding tears.

I may mention as a great advantage, too, that there is no necessity to exclude the patient from light and fresh air (a deprivation in itself injurious to health, especially in chronic ailments), a simple shade or veil being usually sufficient to secure speedy comfort for the patient.

I have only referred to the employment of belladonna, but it is not improbable that stramonium and hyoscyamus, which resemble belladonna in their action, or even *conium*, might be of service; but of these I cannot speak from personal experience. Opium, on the other hand, which contracts the pupil, I have employed, but not with advantage.

It must not be supposed that in mentioning the benefit to be derived, as I believe, from the administration of belladonna I intend to suggest that this should constitute the only treatment. The ordinary hygienic regimen, as regards diet, exercise, pure air, warmth, and cleanliness, is required. The same attention should be paid to the secretions and to the building up of the general powers of the system as is usually employed; and any local results of inflammatory action which may have occurred will still make full demands on the skill, the tact, and the patience of the surgeon. It is for the relief of the *reflex spasm* that the belladonna is administered, and if it

effect this, the first and most difficult step towards reparation is taken; for whilst the eye is kept rigidly closed, the normal nutrition of the part is impaired, the unhealthy action is progressing, and the employment of local remedies is prevented or impeded.

I think it right to add that, though the views I have put forward were arrived at and committed to writing long since, I have found, whilst putting this paper together, that the same theory has been advanced in a very excellent essay by Dr. Thorp in the *Dublin Journal*, and which I have just read for the first time. Dr. Thorp does not, however, mention the treatment by belladonna, but recommends in inveterate cases, and especially in those complicated with cutaneous affections, the internal administration of arsenic.

The principal points in this paper may be stated concisely as follows:—

1. One form of strumous ophthalmia is characterized by *inability* to open the eye, in consequence of *involuntary* contraction of the orbicularis palpebrarum.
2. This reflex contraction is in relation with hyperæsthesia of the retina or first nerve *alone*, or (more generally) of the ophthalmic branches of the fifth likewise.
3. The hyperæsthesia of the conjunctival, lachrymal, and nasal branches induces the reflex acts of closure of the eyelids, lachrymation, and sneezing.
4. The hyperæsthesia is occasionally uncomplicated; but, in most cases, it is soon followed by low inflammation of the conjunctiva, cornea, &c., dependent possibly on the impaired nutrition of the membrane from the altered nervous action, as well as from the mechanical irritation of the parts.
5. For the relief of this hyperæsthesia and spasmodic contraction of the lids, such medicines as belladonna, hyoscyamus, conium, or stramonium, which allay nervous sensibility and relieve spasm of the sphincters, would seem to be indicated; and of these, belladonna certainly has been found to be practically useful.

Regency-square, Brighton, Oct. 1865.

ON A CASE OF PUERPERAL CONVULSIONS TREATED BY CHLOROFORM.

INDUCTION OF PREMATURE LABOUR.

By FREDERICK CLOWES, M.R.C.S.

MRS. J— consulted me on Monday, Feb. 21st, 1865, on account of slight dyspnoea, which she attributed to cold incurred when standing for some time on the ice the day previous. She had arrived at the end of the seventh month of her pregnancy, and prior to this had enjoyed good health. On examination, I found the pulse very slow, 46 per minute; she had no sickness, pain, or other ailment. The urine passed was copious, largely deposited urates, and was free from albumen. Diaphoretics and aperients were administered, and the symptoms were relieved by the next day. Improvement continued until Saturday, the 25th, when the pulse and respiration were natural; but headache and faceache were much complained of. At three A.M. on the 26th she was seized with a severe convulsion, and my partner, Dr. Hamilton, immediately saw her. Cold was applied to the head, and an enema was administered, which was followed by a free evacuation. Within a very short time she had another fit. On examining the urine passed, it was found loaded with albumen. She was then enveloped in a blanket wrung out in very hot water, and being thoroughly packed in it she rested for some hours. We now obtained the advice of Mr. Gough, of Kendal, who remained with us until evening. Professor Simpson was also telegraphed for; but the arrangement of Sunday trains prevented him coming on that day. The free perspiration induced by the blanket-bath brought no relief; but a third and then a fourth fit seized her. The inhalation of chloroform was now begun, and encouraged by a telegram from Dr. Simpson to “keep down the fits by much chloroform,” she was kept under its influence for about two hours, during which she lay undisturbed. About an hour after its withdrawal she was thrown into another fearful fit, which left her so long pulseless and without any appearance of life as to make us despair of her ever rally-

* Middlemore on Diseases of the Eye, vol. i., p. 243.

† Middlemore, vol. i., pp. 242-3.

ing. This was succeeded by long and deep coma, which was shortly after interrupted by another fit of a milder character than the former.

We now determined that she should be kept under the deep and continuous influence of chloroform; and from half-past two P.M. on Sunday until half-past eight A.M. on Monday she was maintained in a state of complete anæsthesia. Occasionally during that time symptoms of returning convulsions showed themselves, but were as quickly assuaged by a more liberal use of the chloroform. On discontinuing the anæsthetic on the Monday morning, she awoke in a perfectly natural state. Late on Sunday night a quantity of urine had been drawn off by the catheter, and was found to contain much blood and albumen; but on examining that obtained on Monday morning, there was a marked decrease of both. Cold was applied to the head from the first, and continuously; and in the forenoon of Sunday a drop of croton oil was placed on the tongue, which, in the course of three hours, effectually operated upon the bowels. The administration of vinegar was also attempted, but had to be given up, as any attempt to swallow fluids induced convulsive symptoms. Mr. Gough met us again in consultation on Monday morning, and we resolved that, as Dr. Simpson's arrival was expected at four P.M., we should refer to him the question of induction of labour. Up to the arrival of Dr. Simpson in the afternoon, the patient continued to improve. On careful examination, he (Dr. Simpson) detected very feeble action of the fetal heart, and gave his opinion that the child might possibly live. On now examining the urine last passed, it was found less albuminous. After full consideration, Dr. Simpson concluded—

1st. That there was a probability of both mother and child recovering.

2nd. That if the child lived, it would be most hazardous to allow the mother to go on to her full time, because, sooner or later, the convulsions would be certain to return, and recur at short intervals until the expiry of gestation, and the patient could not be expected to survive a repetition of such an attack as she seemed now emerging from.

3rd. That if, on the other hand, the child died, it would be naturally expelled, most likely in a short time, thus rendering any interference unnecessary, unless in the event of an increase of the albumen threatening a return of the convulsions, in which case interference would not only be warranted, but absolutely necessary for the safety of the mother.

On the following day (the 28th) slow improvement could still be observed, and the amount of albumen was decreasing.

March 1st.—Patient in much the same condition. Foetal pulsations stronger.

2nd.—Foetal heart heard distinctly. Albumen less.

3rd.—Foetal heart less audible. Only a trace of albumen.

4th.—Foetal heart inaudible.

5th.—Notwithstanding the most careful auscultation, no foetal bruit could be heard. An examination of the urine revealed a decided increase in the quantity of albumen, and this was accompanied by some oedema. In the evening a further examination showed a rapid and increasing return of albuminuria, and, dreading the danger of a recurrence of convulsions we at once decided to induce labour. I adopted the plan recommended by Prof. Simpson, of introducing into the uterus an elastic catheter, and leaving it there until labour is fully established. On auscultation of the abdomen I detected no placental souffle anteriorly, but found it very distinct far back on the right side. Having therefore inserted the point of the catheter between the membranes and the neck of the uterus anteriorly, I withdrew the wire, and passed the instrument into the cavity of the uterus without meeting the least resistance. In the course of three hours pains of labour came on, and were ushered in by a slight discharge of blood, which continued for some little time. The patient was chloroformed, and kept so during the labour; and no symptoms of convulsions displayed themselves. A few hours sufficed for the membranes to dilate the os uteri, and the catheter was withdrawn. The membranes were carefully preserved until the os uteri had been thoroughly distended and the head had descended to the perineum, so that when the liquor amnii was discharged the head was soon born. The child, however, manifested no signs of life, and all efforts to induce respiration were in vain. A rather free discharge followed the expulsion of the placenta, and the patient was thrown into an alarming state of prostration. Brandy and champagne were vomited, and a little blood was visible in the fluids ejected. The administration of ice, however, had a good effect, and she rallied towards evening.

Her convalescence was slow, but the albumen gradually

diminished, and within a few weeks was entirely absent. She has now recovered.

Remarks.—In the case above reported there are suggested practical questions of immense importance. Previous to her attack of convulsions the symptoms were by no means sufficiently urgent to warrant the induction of premature labour. After the commencement, and during the period of their invasion, however, such a measure might have served to abate them, but would certainly have been fraught with great danger, seeing that the slightest noise or disturbance—the attempts she made, for instance, to swallow fluids—immediately induced a fit. I attribute the cessation of the convulsions to the *full and continued* influence of chloroform. During the eighteen hours fourteen ounces of the anæsthetic were used. Dr. Simpson suggests that the sugar obtained by the system from the chloroform has a beneficial effect upon the poisoned blood. Be this as it may, the blood was evidently in this case thoroughly saturated with the poison, and the effect of the chloroform was much calculated to diminish the super-polaric condition of the nervous system, and thus, by preventing convulsions, to preserve life until the poison was eliminated. Prior to its induction there was no prospect of labour occurring spontaneously. The pressure of the gravid uterus had again rendered the urine so heavily albuminous as to make it perfectly necessary to relieve that pressure, and so avoid a recurrence of the convulsions. Bleeding, be it observed, was not had recourse to, deemed it out of the question, as the patient was already anæmic, and the state of prostration and shock which followed delivery made me glad that I had not adopted such a measure. Past experience has made me question much the propriety of bleeding in cases of so-called uræmic poisoning.

Soon after the above case occurred, I was called to another of a similar nature. The convulsions in this case were truly puerperal, supervening ten days after labour, and were successfully treated by chloroform. The patient was a healthy young woman. It was her second confinement, and her labour was natural. Prior to her attack her progress had been satisfactory. The fit seized her one evening on her first attempt to rise; it was slight, and no other followed until the next evening. The state of the uterus, lochia, &c., was natural, and the urine free from albumen. On the following evening a succession of severe fits took place at short intervals. She was now kept under the influence of chloroform for the night, and on withdrawing it in the morning she awoke feeling very well, and again continued so until evening, when another severe fit occurred. She was again chloroformed for some hours, after which she enjoyed a good night's rest, and remained comparatively well during the following day. As night approached, however, symptoms of a return of the fits showed themselves, so that with the view of warding off what seemed now to be a periodic attack, chloroform was at once administered. She was maintained under its influence for three hours, and the desired effect was gained. During a week or more after this, premonitory symptoms of convulsions manifested themselves nightly, but were as often averted by a full dose of the anæsthetic. The subsidence of the convulsions was succeeded by a pain in the right side of the chest, accompanied by cough, and after a few days she expectorated an immense quantity of extremely fetid matter. This continued in a greater or less degree for nearly a fortnight, but afterwards gradually subsided, and she has now completely recovered.

Windermere, Oct. 1865.

CASE OF ANEURISM OF THE THORACIC AORTA.

By JULIUS POLLOCK, M.D.

In the early part of the present year, J. S—, aged forty-seven, consulted me for a pain in the loins, more severe on the right side, which he took to be lumbago. The urine was high-coloured, but contained no albumen. I gave him alkalies, and ordered a belladonna plaster, eight inches by four, to be applied to the back, opposite the seat of pain. These measures relieved him, and subsequently I ordered citrate of iron and quinine, which seemed to strengthen him and give him appetite. He was a thin spare man, rather below the middle height, with a cachectic look.

For some months after I attended him he went on pretty well, but he seems never to have lost the pain in his back altogether. About the middle of July last, however, his wife