

BABIES' SORE EYES, AGAIN.

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IF the remarks of Dr. Derby, in the JOURNAL of February 18th, had been merely an ordinary criticism of my article on the ophthalmia of new-born children,¹ I should not have thought a rejoinder necessary. But when my friend takes exception on the ground that, "coming from one who occupies the official position of a teacher of ophthalmology, it cannot be passed over in silence by those members of the profession who pin their faith on the practice which he reprobates," and further says, "With all respect for the sincerity of Dr. Williams's belief, I would state that he stands comparatively alone among ophthalmic surgeons in discarding the use of nitrate of silver in the ophthalmia of new-born children," I cannot do less than defend the suggestions I made as to the proper course to be pursued in this disease. This I do for the same reason which induced me to write my previous article, namely, that the question has an interest for the profession at large, into whose hands these cases must generally fall.

On the subject in question I have not merely a "belief," but a conviction; a conviction founded, on the one hand, upon my having personally witnessed the method advocated by Dr. Derby, in the practice of the very men themselves whose authority he cites, and on my having seen frequent and recent instances of its harmfulness as applied by those of less experience; and, on the other hand, upon careful observation, and a long and successful use, of milder measures; for which, however, no credit for originality belongs to me.

Dr. Derby quotes four authors "as exponents of the four leading European schools." But of these, one represents the school of Vienna, the other three, virtually, the school of Berlin, all of them being well known as its disciples.

Now, I may appeal to these very men in support of the position I took, that the "cauterization," advocated by them, is *dangerous, cruel, and needless*. Wecker says, "It is true, the cauterizations are very painful for the infants,"² and, "their agitation and sleeplessness are probably due to the treatment they are made to undergo."³ Furthermore, Wecker and others insist most strongly, in their instructions as to the use of the *lapis mitigatus*, on the great importance of its application at exactly the right time, neither too soon nor too late after the previous cauterization — too soon, if applied after the elimination of the eschar before the regeneration of the epithelium; too late, if the epithelium has reformed and

¹ Journal, January 28th, 1875.

² Wecker, *Études Ophthalmologiques*, tome i., page 51.

³ Wecker, *Études Ophthalmologiques*, tome i., page 62.

the tumefaction of the conjunctiva reappeared. "It is only by cauterizations applied precisely before this period of relapse that we can arrive at a favorable result; and it is difficult to decide whether this has occurred, as it is only by a very attentive observation that it can be perceived. The increase of secretion, of which the patient can best inform us, gives us the best indication as to the time when we should repeat the cauterization."¹

Here is an interesting state of things! Even the skilled oculist cannot, by his own observation, determine, in an adult, the proper time for cauterizations which he avers must be made with great precision; but must get his most important information from the patient's sensations. How, then, can the general practitioner determine these nice points, and in babies, too, who cannot give any information?

Wells says,² "In out-patient practice, where the patients can only be seen two or three times a week, by far the best remedy is the injection of the collyrium of alum and zinc, as employed at the Royal London Ophthalmic Hospital (zinc. sulph. gr. ij., alum gr. iv., aquæ destil. ʒi.). A little of this is to be injected with a glass syringe between the lids. The frequency of the injection must be regulated according to the severity of the disease." This, "by far the best remedy" for those who are not to be under his constant supervision, he evidently considers all-sufficient to insure good results; for of course he would not allow eyes to be endangered for the want of any essential means. But he goes on to say, "If the patient can be seen every day, or even more frequently, the mitigated nitrate of silver in substance should be used." Yet he tells us, in another chapter,³ "The injudicious and excessive use of caustics in the treatment of purulent ophthalmia (more particularly that of children) may change the disease into the diphtheritic form."

Galezowski, of Paris, says,⁴ "The cauterizations with the mitigated crayon of nitrate of silver sometimes cause such violent pain that the infant's cries are followed by convulsions."

In the splendid work recently published by Stellwag,⁵ Professor of Ophthalmology in the Imperial Royal University of Vienna, we find, "The *abortive* method, which has very recently been adopted, involves the most danger. This consists in penciling the conjunctiva, once or twice a day, with strong solutions of nitrate of silver, say ten or twenty grains to the ounce of water, or with the mitigated stick (nitrate of silver and nitrate of potash). The slough of itself increases the inflammation already caused by the agent. The result is very generally a marked increase of the inflammatory symptoms, which antiphlogistic

¹ Wecker, *Études Ophthalmologiques*, tome i., pages 48, 49.

² Soelberg Wells, *Treatise on Diseases of the Eye*, pages 32, 39.

³ Soelberg Wells, *Treatise on Diseases of the Eye*, page 43.

⁴ Galezowski, *Traité des Maladies des Yeux*, page 182.

⁵ Stellwag von Carion, *Diseases of the Eye*, page 319.

treatment is not always able fully to subdue by the time of the next cauterization.

"This is beginning to be understood by those who advised this method of treatment."

Thus it appears to be sufficiently proven, by our critic's own authorities, and others familiar with the method, that the nitrate of silver, *lapis infernalis*, and its half-brother, *lapis mitigatus*, are still to be regarded as edged tools, not to be heedlessly handled even by the most experienced; that their use in this disease is attended by much suffering and danger, unless resorted to at a particular stage of the disease, which stage cannot easily be determined even by experts; and that they are by no means essential remedies, since patients (*vide* Wells) get along without them when strict cleanliness and mild astringents are the means relied on. Let us see what others say can be done without these agents.

The founder of the Royal London Ophthalmic Hospital, Moorfields, as great a genius in his day as Graefe in ours, thus writes in regard to the treatment of this disease: ¹ "Very moderate astringents are the best. I have never had occasion to employ any other astringent than a solution of alum, varying from two to six grains to the ounce of water."

Lawrence says, ² "Even the most violent form is easily manageable, and will do well when properly treated. We generally use a simple solution of alum, in the proportion of two grains, which may be increased to six grains, in the ounce of water. Such was the treatment at the London Ophthalmic Infirmary, and out of many hundred cases I hardly recollect one where the eye suffered in any respect."

Walton thus lays down his treatment of purulent ophthalmia at the Central London Ophthalmic Hospital: ³ "The astringent I generally use is a solution of alum, four grains to the ounce of water. I feel assured that all applications to the conjunctiva that produce severe or prolonged pain are injurious. I attach great importance, at all periods of the disease, to frequent syringing with astringent lotions."

Druitt says, ⁴ "The ophthalmia of new-born children, if submitted to early treatment, is easily cured by great attention to cleanliness, and by incessantly washing away the discharge with some mild astringent lotion. The practice at the Central London Ophthalmic Hospital is to wipe away from the eye as much discharge as possible; then to apply a lotion of four grains of alum to an ounce of water."

Three of the colleagues of Mr. Wells at the Moorfields Hospital, all of them men of the highest standing, have recently published works on eye diseases.

¹ Saunders, Treatise on some Practical Points relating to Diseases of the Eye, page 14.

² Sir William Lawrence, On Diseases of the Eye, pages 224, 226.

³ Haynes Walton, Operative Ophthalmic Surgery, page 243.

⁴ Druitt, Vade Mecum, page 362.

Dixon says,¹ "The best plan of treatment seems to consist in using, very frequently, a weak astringent lotion, so as to wash away the secretion before it has time to collect in any quantity. If the smooth point of a syringe be carefully placed just within the commissure of the lids, the wash will be propelled over the whole surface of the affected membrane. The surgeon must strongly impress upon the nurse how much the great question of the preservation of the child's sight depends on the regular use of the injection."

Hutchinson writes,² "With regard to the treatment of purulent ophthalmia, when occurring in syphilitic infants, the local remedies are by far of the greatest importance. Drops containing one or other of the mineral astringents, nitrate of silver, acetate of lead, or alum, should be prescribed. The two latter are preferable on account of the freedom with which they may be employed."

Lawson tells us,³ "The indications for treatment are, to wash away the discharge from the eye as often as it collects, and to use some astringent lotion to arrest the re-secretion of the purulent matter. The lotion which I generally use is one of alum, six grains to an ounce of water."

To come nearer home: it is not long since I heard one of our most experienced ophthalmic surgeons, one who has been partial to the use of nitrate of silver in other circumstances, condemn its employment in this disease, at one of the meetings of the Suffolk District Medical Society, saying that he had known a great many eyes put out by its injudicious use. Since the publication of my article of January 28th, three of our colleagues in this city, whose large obstetric practice has brought many cases of infantile ophthalmia under their observation, have told me that for a long time they had used only the mildest means, and with full success.

I will add only the following letter, the unsolicited testimony of a physician whose experience and good judgment make his opinions highly valued throughout the community in which he lives.

"February 20, 1875.

"I have lately seen in the *JOURNAL* your remarks on ophthalmia of new-born children, and the reply of Dr. Derby in another number of the same *JOURNAL*.

"A painful experience, many years ago, impressed on my mind the necessity of prompt treatment in this disease, and I have been in the habit of using the nitrate of silver, either solid or in strong solution, until within the last four years. Having a case which caused me unusual anxiety, I called you in consultation, and, following your advice, I used the treatment that you have since recommended in your paper.

¹ Dixon, *Guide to the Practical Study of Diseases of the Eye*, page 67.

² Hutchinson, *Syphilitic Diseases of the Eye*, page 187.

³ Lawson, *Diseases and Injuries of the Eye*, page 19.

The simplicity of this treatment, its painlessness, and the good result of it were so marked, that I have since adhered to it, with invariable success.

“My own private practice, of course, does not furnish a very large field for the observation of this disease; but I have had an opportunity to see it at the St. Mary's Asylum in Dorchester. The very intelligent Sister of Charity at the head of this asylum has told me that she has seen, in the course of her experience in different hospitals, a great deal of the ophthalmia of the new-born and the purulent conjunctivitis of older children, and that the treatment has always been the application of caustics; but nowhere has she seen recovery so early and with so little suffering as we have had under your plan.”

If the treatment advocated by Dr. Derby had in it anything of novelty, my objection to it might be ascribed to ignorance of its merits. But my acquaintance with the *lapis mitigatus* has been long, and my opportunities for seeing what it could do somewhat extensive. I was with Desmarres, at Paris, when he introduced it into use, and had ample facilities for seeing how far it justified the good opinion of its originator. On my subsequent visits to Europe I again watched its effects as applied by Graefe and Wecker; but I then saw no reason for reversing the judgment I had formed after previous observations and my own personal experience in its use. Nor have I since seen any such reason.

My opinions, therefore, have been neither hastily nor ignorantly adopted. The article in the JOURNAL of January 28th, to which Dr. Derby has objected, was prepared because I had within a short time previously witnessed cases of blindness where the disease had been treated (as would be deemed judiciously) with nitrate of silver. The profession certainly have an interest, for their patients' sake and their own, in learning how this serious affection may be treated the most quickly, safely, and pleasantly. And the question is by no means to be decided by comparative results of treatment in the two eyes, in one, or a few cases. The severity and duration of symptoms vary greatly, in the eyes of different infants, and in the two eyes of the same child. Many cases, which at first threaten to become purulent, turn out to be merely simple catarrhal inflammation, and subside by attention to cleanliness alone. Could the disease be shortened by the caustic treatment, we might accept its greater danger, and employ it in these cases as well as the severer ones, for the sake of the shortened term in the latter; but this is by no means proved. On the contrary, while severer cases are not shortened, and mild ones are aggravated, there are other immense disadvantages and serious dangers incident to this method. The infant, expecting fresh tortures, cries whenever the eyes are touched, though it be only for carrying out the “strict attention to cleanliness,”

which even the advocates of cauterization admit to be equally essential. The lids are spasmodically contracted, and complete eversion often takes place. Any examination of the condition of the eye, and especially of the state of the cornea, is rendered a very difficult matter; and the repeated use of an elevator becomes necessary, when otherwise gentle raising with the fingers would have sufficed for opening the lids. This necessary process of inspection is thus not only painful, but, in case of ulceration, may cause rupture of the cornea and destruction of the eye.

I would willingly stand alone, for a time, among ophthalmic surgeons, if, in so doing, I could be instrumental in substituting, for any harsh method, a more successful and milder treatment. It is not twenty years since I endeavored to show that salivation was not a *sine qua non*, as all the authorities taught, in the treatment of iritis. Few would now do reverence to the old plan. Mr. Wells writes,¹ "Formerly it was very much the custom to place all cases of iritis under the influence of mercury. Now, however, a more rational mode of treatment obtains." Stellwag says,² "The old belief in the absorbent power of mercurials has been very much lessened in modern times."

As regards another important point, the use of lead in collyria, I still have the "bad eminence" of standing nearly alone, most of the authors including acetate of lead among their list of remedies, whilst urgently warning against its use in some frequent complications of the very cases in which they advise it. One colleague, however, already appreciates the situation. Mathewson says,³ "I go into these details of the evil results of the use of a popular prescription, sanctioned by the authority of some of the best known writers, to justify my opinion that lead applications to the eye should be wholly discarded. Certainly there is no necessity for using this remedy when there are so many other equally good, and their use unattended by such dangers. Williams, of Boston, is the only authority I have consulted who takes this common-sense view of the matter."

In advocating mild treatment for the ophthalmia of new-born children, I neither stand alone, nor, on the other hand, do I claim unanimous consent. Of course I am well aware that many able authors advise the use of the *lapis mitigatus*. But many equally judicious men prefer other means. My own mind is fully persuaded; and I feel justified in choosing a method marked by "*simplicity, painlessness, and good results*,"⁴ and in asking the profession to let the babies off easy.

¹ Wells, Diseases of the Eye, page 159.

² Stellwag von Carion, Diseases of the Eye, page 192.

³ Mathewson, Notes on Ophthalmic Practice. New York Medical Record, November 16, 1874.

⁴ Vide letter above inserted.