C A S E
OF
INTENSE AND LONG-CONTINUED
PHOTOPHOBIA AND BLEPHAROSPASM,

RELIEVED BY
THE INHALATION OF CHLOROFORM.

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C. M—, a young woman of twenty-two years of age, of a healthy and cheerful appearance, an inmate of the Glasgow Asylum for the Blind, was brought to me, February 13th, 1857, affected with intolerance of light and spasmodic closure of the eyelids, so intense that, with the strongest effort of the will, she was unable to open her eyes in the slightest degree. It was with difficulty that I could raise either of her upper eyelids sufficiently to obtain a partial and momentary glimpse of the eyeball. When I forcibly opened either eye I generally found the pupil completely turned up behind the upper eyelid; but as the eye was exposed, it suddenly darted down so as to hide the pupil behind the lower eyelid. This convulsive movement was so rapid, that it was impossible to examine the state of the eyeball. The white of the eye, however, appeared free from redness, and the corneæ pretty clear. The corneæ seemed to me to be below the average size, but this turned out to be a mistake. The patient saw the light when the

eyes were thus opened, but no object. The influx of the light evidently caused acute distress, so that the eyes closed with violence against it. Neither the epicranii nor the corrugator supercillii was affected, but only the orbicularis palpebrarum; and, perhaps sympathetically, the levator or depressor oculi, as was shown by the rapid rolling of the eye upwards or downwards on its being forced open. There was evidently hyperæsthesia of the retina; but the integuments betrayed no increased sensibility to the touch. Many of the teeth had suffered from caries. I considered the case as one of irritation, reflected probably from the optic nerve through the brain to the facial; although it seemed doubtful whether the state of the teeth, by affecting the branches of the fifth nerve, might not be the source of the evil.

I learned with astonishment that the state of photophobia and rigid compression of the eyelids, in which I saw the patient, had continued without intermission for sixteen months, and that in this condition the girl had been admitted into the Asylum for the Blind as one hopelessly deprived of sight. She stated that her eyes had suffered much from inflammation (probably of the nature, I concluded, of phlyctenular conjunctivitis, or of scrofulous keratitis) when she was a child; and I gathered that she had been asthenopic, being unable to read beyond a few minutes at a time. She had also suffered much from headache, and from toothache. She was first attacked with blepharospasm about two years ago, the eyes continuing shut on that occasion for three days. They then opened, and continued free from spasm for some months. Another attack followed, and continued during six weeks; then an intermission for three weeks, then a relapse for a fortnight; and lastly the present attack, which has proved of much longer duration than any of the former.

The general health of the patient appeared to be excellent; her appetite was good; her bowels regular. She had no hysterical symptoms. She was not conscious of any intermission of the complaint during the period stated. Sleep

seemed to have no influence over it. It was neither better nor worse at the catamenial periods, which were regular. She could assign no exciting cause for the present, nor for any of the former attacks.

When, some ten years ago, the inhalation of the vapour of sulphuric ether came into vogue for rendering insensible patients about to undergo surgical operations, I was induced to try the same practice as a means of alleviating painful diseases of the eye, and, among others, excessive intolerance of light attendant on some of the ophthalmiæ. In the 'Medical Gazette,' for June 18th, 1847, I inserted a short notice of its good effects, and pointed out the remarkable fact that the relief given to painful and spasmodic diseases of the eye, by the inhalation of a narcotic vapour, was not temporary, but generally permanent, a circumstance which greatly recommends such medication to the attention of practitioners. Led, then, by my former experience of the inhalation of sulphuric ether in somewhat similar cases, I resolved to try that of the vapour of chloroform in the case of C. M—.

At intervals of three or four days, I put her seven times under chloroform, never pushing it to complete insensibility. Each application produced a decided diminution of the symptoms, the patient being able, after the third or fourth application, to move the eyelids over the eyeball, although not to open them, while on my lifting the upper eyelid with my finger, she caught a glimpse of objects before her as she rolled the eye from behind one or other eyelid. After the seventh application, she opened her eyes fully, and saw every object around her.

When she called on me, on the 13th of March, she was able, with some little difficulty, to read a few lines of ordinary type. I then observed that the eyes were of normal size, the pupils rather large, the corneæ somewhat nebulous; that the patient held the book near; and that the eyeballs were slightly affected with oscillation. She was of course greatly delighted with the surprising change in her state of vision, being able to walk about without being led, and

seeing everything around her—a striking contrast to the state of eclipse in which she had been for upwards of a year and four months. In this case it happened, as in other cases which I had seen, that a permanent effect had been produced on an efferent nerve on whose agency the spasm depended, and not a mere temporary relaxation of the affected muscle.

March 20th. — Eyes continue strong. No return of spasm, nor intolerance of light.

I now found that the vision of the right eye was considerably inferior to that of the left, so much so that she could not read with the former, from its having suffered more severely from inflammation, to which both eyes had been subject in infancy.

April 3d.—Continues well.

It becomes a question of much interest both in a physiological and in a therapeutical point of view, how the asphyxia produced by the inhalation of a narcotic vapour should exercise so favorable an influence over hyperæsthesia and spasm, as this case shows it to do. That it is the presence of the anæsthetic in the blood, operating on the nervous centre which proves so useful, scarcely admits of doubt. Whether the spasm is to be attributed to morbid action reflected from the fifth nerve, or from the optic, the chloroform, circulating with the blood, by removing the excitement of the sentient nerve, subdues the inordinate action of the motive one, namely, the facial; and by repeating the application of the medicine till the symptoms are overcome, the effect, as far as my experience goes, happily proves permanent. Of the action of chloroform, sulphuric ether, and indeed of narcotics generally, on the blood or on the nervous substance, few, I presume, will feel any difficulty in acknowledging that, in spite of the theories of Baron Liebig, Dr. Snow, and others, we at present know nothing.¹

¹ See Headland's 'Essay on the Action of Medicines,' 2d edition, p. 253, London, 1855.