

management that I have generally found beneficial in such cases is, an abstinence from all stimulating substances, with, at the same time, a full allowance of plain nourishing food, and, for medical treatment, a continuance, for a considerable time, of counter-irritation on the nape of the neck, either by the repeated application of antimonial ointment or by the insertion of an issue; and occasionally some other remedies applicable to such cases are required, as sulphate of quinine, nitrate of silver, &c.

In noticing those functional affections of the heart, if I have not gone into as minute or as lengthened details of diagnosis and treatment as might seem at first sight requisite, it is because I believe it is necessary only to point out the principal leading features; the discrimination of my readers will supply all my omissions better than I could myself.

---

ART. II.—*An Account of an Epidemic Ophthalmia which prevailed among the Children of the South Union Workhouse during the Summer and Autumn of 1840.* By CATHCART LEES, M. B., Physician to the Institution, and to the Pitt-street Institution for the Diseases of Children.

ALTHOUGH some writers have lately attempted to deny, (on the plea of simplifying ophthalmology,) that there are specific diseases of the eye, that is, diseases assuming distinctive anatomical characters, because the patient is under the influence of some peculiar general affection; and although fully aware, that many epidemics of ophthalmia have been accurately described, as each narrator, either led astray by a minute application of particular symptoms, or influenced by the charm of novelty, has thought that he had something new to communicate; yet I think that it may not be uninteresting to the Profession to give a brief account of an epidemic ophthalmia which has prevailed in the workhouse of the South Union among the children, upwards of four hundred having been attacked with it.

I feel more anxious to publish this account, because the system of congregating large masses of the poor together in this country being now on trial for the first time, and undergoing a period of probation, it may induce such of my professional brethren as have the charge of similar establishments in the country, to place on record the history of such diseases as may prove epidemic, endemic, or contagious, in their several institutions; for, by a reference to such records, we may hereafter have an opportunity of judging whether diseases undergo any material alteration in their nature and constitution in different situations at the same time, or in the same situation at different periods of time; also, whether they can be accounted for by any general causes, any peculiar condition of the atmosphere, or by the operation of some unknown local causes, not perceptible to our senses, and known to us only by their effects. Thus the simultaneous and successive influences of any morbid cause over large communities may disclose relations which may set us on the track of discovering the virtual identity of many diseases, which, in the present state of our knowledge, constitute interesting but unsatisfactory and difficult objects of inquiry.

The ophthalmia commenced on the 4th of June last, in a part of the institution (separate from the main body of the building) allotted for the children, and capable of containing four hundred, situated in an open and salubrious place, having a southerly aspect, but which, from being over crowded, as well as from some other defects, has proved the most unhealthy part of our establishment, an epidemic of petechial fever having broke out there a short time previously.

The weather at this time was very cold, with sharp winds; so that in the first few cases I considered it as simple acute ophthalmia, excited by particles of dust having been blown into the eye; however it spread so rapidly, and assumed such a decided catarrhal character, with a peculiar state of conjunctiva and pupil, that I was led to regard it as an epidemic disease, and in this opinion I was confirmed by Mr. Creighton, who immediately

recognized the disease as one which they frequently suffered from while he had charge of the Foundling Hospital, and which he regarded as of a highly contagious character.

I shall now briefly describe a few of the cases, sufficient to illustrate the principal features of the disease ; but as the general treatment of this epidemic presented nothing peculiar, I shall not detail it, but I wish to call attention to the local application, which was very simple and efficacious, and I think not in sufficient usage in this country, namely, the undiluted liquor plumbi subacetatis dropped into the eye. This mode of treatment is peculiarly serviceable in a large institution like the poorhouse, where the expense of leeches would prove considerable, exclusive of the trouble, and the risk of inducing erysipelatous inflammation in such unhealthy habits.

CASE I.—Anne Magill, æt. 11, says she went to bed perfectly well on last night, (June 22,) she awoke with a sensation of sand in her left eye ; there is now profuse lachrymation, with great itching ; no intolerance of light ; the pupil is largely dilated, and very sensitive, the palpebral conjunctiva, semilunar fold, and caruncle are very fluid, villous, with slight stringy discharge on the lower lid, which comes away easily, but forms again in a few minutes ; there is no pain, except at night, nor constitutional disturbance complained of ; but the tongue is swollen, flabby, coated with yellow fur.

R. Calomel iij., Rhei. gr. x ij. H. fiat Bolus.

And wash the eye with tepid water.

Next day the conjunctiva covering sclerotic was greatly congested, vessels of bright red with slight ecchymosis, as if they had given way in some places, profuse lachrymation, with stringy, mucous discharge from both eyes. I dropped into both eyes the undiluted liquor plumbi, it did not cause much pain, but was decomposed immediately, forming a dense white deposit. I also ordered a collyrium of lead lotion.

Next day, the eyes were greatly improved ; I pursued the

same treatment. On the third day, as she was nearly well, I contented myself with the lotion, and gave her some bark and magnesia, which cured her perfectly in a week.

This is one of the purest forms, occurring in a healthy child without any complication, and showing the efficacy of the treatment by the liquor plumbi. I had previously used the nitrate of silver in the proportion of gr. vi. ad ʒ i.; but as this caused severe pain and discoloured the integuments, I generally preferred the undiluted liquor plumbi.

CASE II.—John Sheridan, a healthy boy, æt. 5, has the conjunctiva of both eyes greatly congested, with profuse lachrymation, the eyelids red, from constant rubbing, for the last two days; there is no intolerance of light, but he says that there is sand in his eyes, particularly at night; the pupils are largely dilated, and very sensitive to the stimulus of a strong light; the ocular conjunctiva appears to be covered with minute granulations, transparent, running along the course of the vessels, but quite distinct from them, and, on examining with a lens, the same appearance is discernible on the cornea; the palpebral conjunctiva is very villous, with a stringy, mucous discharge. I applied nearly the same treatment as in the former case, and with similar results.

The peculiarity of this case consists in the granular state of the conjunctiva, which appeared to constitute a distinct character, which I have since met with in several cases, and which is quite distinct from that affection termed granular lid, which is so often the result of common catarrhal ophthalmia, if neglected or badly treated.

CASE III.—I contracted the disease myself, and can therefore detail the sensation caused by it. I had spent the morning among these cases, and then went away to the country; while driving, on a car, about three hours after leaving the institution, I suddenly felt as if a grain of sand had been blown into my eye, in fact I could not keep my fingers from rubbing the lid; there was a constant flow of tears, so that I had to return home,

and immediately submitted myself to treatment. My friend Mr. Hamilton does not recollect whether the pupil was dilated, but he was greatly struck by the deep congestion of the vessels of the conjunctiva, coincident with the total absence of pain, or ordinary symptoms of inflammation, as, except for the constant itching and profuse flow of tears, I felt in other respects perfectly well.

Many cases, presenting nearly similar appearances, but in a very early stage and a mild form, were cured by merely changing the air, cleanliness, and some mild aperient.

There was generally but little or no constitutional disturbance, in some there was slight catarrhal fever. The disease was, however, very liable to relapse more than once, and then became always more serious and intractable, particularly in strumous subjects, in whom it invariably became pustular, with a ferretty condition of eye, and great intolerance of light. Those who have had opportunities of witnessing the rapid spreading of catarrhal ophthalmia in large institutions or among soldiers, cannot doubt its contagious character. I use the term, in a comprehensive sense, without reference to the distinction between infection and contagion, as I regard it as not only communicable by actual contact of morbid secretion, but also through the medium of the atmosphere, the air becoming, as it were, tainted.\* Indeed almost every adult who was occupied about these children suffered from its effects; but in them it generally assumed a more serious aspect, being more painful, and attended by severe chemosis, of which the following case is a good example.

---

\* During this period of time many cases of common catarrhal ophthalmia occurred at the North Union Workhouse, also in the workhouse at Cork, where my friend Dr. O'Connor wrote me word that it had been very severe. Dr. Fisher has informed me that it has been very prevalent among the military, chiefly the infantry, many of whom were drafted into the Royal Infirmary for it.

I also find that in the October Number of Johnson's *Medico-Chirurgical Review* notice is taken of a very severe form of ophthalmia which the Belgian army have suffered from for the last few years.

CASE IV.—Biddy Walsh, æt. 40, has intense conjunctivitis of both eyes, with chemosis, cornea is bright, pupils largely dilated, but very sensitive to the action of light, profuse lachrymation, intolerance of light; palpebral conjunctiva highly injected, very villous, with stringy, mucous discharge; eyelids swollen, red from the constant rubbing, caused by intolerable sensation of sand in her eyes; it is of three days' duration; her tongue is foul, but otherwise there is not much constitutional disturbance. As this was the first case attended by such severe signs I was afraid to trust solely to the liquor plumbi, so that I applied the undiluted liquor plumbi to her left eye, which had first been affected, and I applied six leeches to the right eye, and put her on some antimonial medicine. The next day the right eye was much worse, the chemosis increased, but the left eye was much better, I dropped in the undiluted liquor plumbi to both, and next day had the satisfaction of finding them both greatly improved; under this treatment she got rapidly well, but the dilated state of the pupil continued for some time.

The peculiar feature which this case (in common with the others) presented, was that of the largely dilated pupil, which has been characteristic of this form of ophthalmia, and which I have not seen or heard of having been taken notice of by any of our writers on this subject, nor has any surgeon with whom I have conversed seemed to be aware of the fact. Several gentlemen have examined it with me, among others, Mr. Hamilton and Mr. Carlile, Lecturer on Anatomy in Park-street School, who were much struck by the appearance. As the object of this communication is purely practical, I shall content myself with stating the fact, (leaving it to others to theorize on the physiology of this dilatable condition of the iris,) and shall now relate a case where this pathognomic character of the disease prevented my committing a mistake, and subjecting a patient to a severe and unnecessary plan of treatment, but in which, from a previous reasoning, I would have been justified.

CASE V.—A. B., æt. 20, was under my care for gonorrhœa,

in October, the discharge was subsiding under treatment, when, about the twelfth day, he came to me complaining of a sensation as if there was sand in his eyes ; he said that the right eye felt itchy last night ; but that this morning both were affected. There was intolerable itching, with slight mucous discharge ; in fact, presenting the symptoms of incipient gonorrhœa ophthalmia. I was, however, greatly struck by the dilated state of the pupil, and thinking that it might prove to be a case of the epidemic ophthalmia, I ordered him a brisk purgative, dropped into the eye a mild solution of the nitrat. argent. and desired him to send me word, in case that his eyes should become worse. He was much better on the next day, and recovered perfectly in a few days, under very mild treatment.

The practical bearing of the diagnosis in the above case is fully illustrated by the following extract, which I copy from Tyrrell on the eye, one of the latest and best authors on this subject in the English language.

“ There is not any thing in the aspect of the first stage of the complaint to create an alarm in the mind of any one, who has not seen much of this terrible affection, and therefore, the most simple remedies alone are frequently resorted to ; such, however, is the frightful rapidity with which the disease passes from this stage to the destructive termination, that in the lapse of twenty-four hours, in some instances, the mortification of the cornea is complete, and the medical attendant who has left his patient on one day, with what he considered as an unimportant ophthalmic affection, is horror-struck on the succeeding day to find the organ irrecoverably lost for visual purposes.”

If we reflect on those cases which I have described, I think that they must tend to prove that there is some peculiar morbid essence generated by the congregation of the human species, and which manifests itself either externally in this form, or presents itself under some other shape, as erysipelas, diffuse inflammation, hospital gargrene, &c., or it marks itself under the cloak of some internal disease, thus we are all aware

that some contagious disease, as typhus, frequently originate in the animal body, when subjected to the action of certain external causes, as from overcrowding, or ill-ventilated apartments, of which Dr. Southwood Smith (in his valuable evidence before the House of Commons) has given numerous instances taken from the records of work-houses and hospitals. In all my cases there appears to have existed a great tendency to increased action of the mucous system, marked externally by the villous and granular condition of the conjunctiva, while I have no doubt but that internally there existed a similar condition of the mucous follicles of the intestine, for during this period of time many of the children became affected with a low form of fever, diarrhœa, peevishness, one of them died, and dissection revealed an extraordinary development of the glandulæ agminatæ of the lower third of the ileum. Although I do not wish to theorize, or to draw any inference from solitary facts, yet I think that this tends to prove an identity of disease; indeed, acting on this principle, the treatment was nearly the same, as change of air, counter-irritation, with very mild astringents, soon recovered them.

From a review of all these facts, I think that analogy will justify us in inferring, that the one virus is capable of producing different forms of disease, according to the texture on which it falls; and that what we can see externally, in some cases, may be taken, with certain allowances, as an index to the state of parts concealed from sight; indeed, in many cases, the eye appears, as it were, a speculum, in which the physician may study the characters of many diseases reflected on its surface, for as scarlatina is recognized not only by its eruption, but by its sore throat and subsequent anasarca, rubeola by its ophthalmia and bronchitis, so it is probable that all the organs of the economy have some peculiar character impressed on them, depending either on the constitution of the patient, the specific nature of the disease, or the *constitutio anni*, exclusive of the simple distinction into acute and chronic.