Original Communications.

ON CATARRHAL OPHTHALMIA.

By Henry Hancock, F.R.C.S.E., Senior Surgeon to the Charing Cross and Royal Westminster Ophthalmic Hospitals.

Most writers upon ophthalmic diseases describe catarrhal ophthalmia as a purely local affection, depending upon atmospheric changes, especially upon exposure to cold and wet, and essentially requiring local applications for its cure. I believe that this opinion is incorrect; that some other cause is requisite to produce this particular affection of the eyes, beyond those here mentioned; that there must, in fact, be a peculiar condition of system predisposing to this particular affection.

Were atmospheric changes, or exposure to wet and cold, alone sufficient, every inflammation of the eye depending upon these causes would necessarily be catarrhal. This, however, is by no means the case. In one, there may be simple conjunctivitis; in another, rheumatic sclerotitis; in a third, the inflammation will assume a gouty character; whilst, in the class of cases under consideration, it is catarrhal.

The patients most predisposed to catarrhal and its sister though more formidable diseases, purulent and gonorrhœal ophthalmia, are essentially those in a low and depressed condition of the system generally, analogous to that met with in erysipelas; and it is in this class of patients that we find catarrhal ophthalmia most prevalent. It is a perfect pest to the children confined in our large pauper establishments; it is a common companion or successor to the epidemics of low typhoid or typhus fevers which rage among distressed pauper populations. Indeed, it would seem that whatever tends to depress the nervous system, and to vitiate the blood, is a predisposing cause to this form of ophthalmia; and that, although the physical signs may be most apparent in the eyes, they are, in truth, local manifestations of general wrong, against which the treatment should be directed, rather than against the local manifestations themselves. Under these circumstances, I cannot agree with Mackenzie (4th edition, page 441) that, if catarrhal ophthalmia be treated only by general remedies, it will continue for many weeks, becoming the cause of much febrile excitement and constitutional illness, as well as of local distress and danger; or that the conjunctiva will become sarcomatous and rough (granular), and by rubbing, in this state, against the cornea, render it (especially the upper half of it) vascular and nebulous, or even densely opaque.

That the lids become granular after catarrhal ophthalmia, and that they in this condition affect the cornea as thus described, is unfortunately a fact of too frequent occurrence to be disputed; but I cannot admit either that treatment by general remedies solely will cause these lamentable results, or that "special remedies in this disease are inferior in importance to local ones." From many years' experience in the treatment of catarrhal ophthalmia by local astringents, such as nitrate of silver, sulphate of zinc, etc., I am convinced more frequently than otherwise, that their employment prolongs the complaint, and causes granulation of the lids. Freely admitting that bleeding, local or general, frequent doses of calomel, or any violent depleting remedies, do harm and should be avoided, as in erysipelas, I have for some years past entirely restricted my treatment of catarrhal ophthalmia to constitutional remedies, for the most part of an attractive, a stimulating, and tonic character, merely directing the eyes to be fomented frequently with warm water, as much for the purpose of cleanliness as of comfort. I now very seldom see granular lids follow catarrhal inflammation; whilst the cure has certainly not been more protracted than when local applications were most successfully employed. The cases in which this treatment is most beneficial are those described by Mackenzie as "pure mucous or blenorrhœal inflammation of the conjunctiva;" in other words, in simple catarrhal inflammation—ophthalmia, *unaccompanied by supra- or circum-orbital pain*, and for the most part confined, at all events in its early stages, to the conjunctiva and the Meibomian follicles. In these, the disease mostly comes on suddenly, commencing with a sensation of itching and stiffness, speedily converted into a feeling as though grit or sand were in the eye. Upon examination, the eyelashes are found loaded with thickened glutinous mucus. The eyelashes are swollen, their lining conjunctiva being of a darkish red colour and flabby; whilst that of the eyeball, in the milder forms of the disease, is traversed by a network of vessels of the same dark red colour, which can readily be moved by pressing the lower lid against the eyeball, which in most instances is marked, especially at its lower half, by patches of extravasated blood, distinguishing this disease from the more acute and phlegmonous inflammation of the conjunctiva.

In its most simple form, the disease will be restricted to the angles of the lids and adjacent conjunctiva. When more severe, it will extend over the whole surface of the lids and eyeball; whilst, in still more severe and serious cases, the subconjunctival cellular tissue is infiltrated and raised, forming a distinct elevated fleshy ridge around the cornea, which appears sunken in, and at times partly obscured by irregular masses of swelling investing its surface, and constituting that condition termed chemosis. At the same time, the conjunctiva of the eyelids becoming in like manner infiltrated, the latter are puffed and swollen, creating difficulty of opening the lids, and in this way impeding vision.

Even when the amount of chemosis is considerable, the cornea for a time remains clear; but, if this condition exist for two or three days, it will become hazy, opaque, yellowish, and ultimately slough and give way, allowing the iris to protrude, resulting in more or less destruction of vision.

Lacrymation is always increased, the secretion being sometimes quite clear, at other times thick, yellowish, or muco-purulent. The symptoms towards night increase in severity; the intolerance of light is greater; the patient is feverish, and complains of pain and weight in the head, principally in the region of the frontal sinuses, and in the course of the lacrymal sac and ducts. These symptoms usually subside after the patient is quiet in bed; but they are sometimes so severe as entirely to prevent rest or sleep. In such cases, the Dover's powder or opium is of the greatest service, and will frequently cut short the attack. In ordinary cases, I give bark and ammonia; but, when the patient resides in a low damp locality, it may be necessary to give the sulphate of quinine in full doses, with or without opium, according to the intensity of the pain and the irritability of the patient; whilst the local applications should be restricted to warm water, or at most a poppy-head fomentation, to the exclusion of all local remedies of a stimulating or astringent character.

So long as the tongue is coated, and the breath foul and offensive, mild alterative aperients, such as

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pilula hydrargyri, with hyoscyamus and extract of colocynth, are of great service, especially where there are chemosis of the conjunctiva, and tendency to opacity or sloughing of the cornea. In such cases, bleeding, whether local or general, violent purging, and local applications of a stimulating and astringent character, do considerable mischief; whilst, on the other hand, I have commonly seen the happiest results from mild alterative aperients—bark and ammonia or quinine, with or without opium, according to the amount of pain; with warm and soothing local applications.

That the disease, even in its most severe form, will yield, and yield rapidly, to constitutional remedies alone, is amply proved by the cases here subjoined.

Case I. J. E. F., aged 8 months, was brought on October 10th, 1864, to the Royal Westminster Ophthalmic Hospital, suffering from catarrhal ophthalmia of both eyes, of one week's duration. The conjunctivæ were chemosed, and discharged profusely; and the eyelids were so much swollen that the child could not open his eyes.

℞ Ammoniæ sesquicarb. gr. v; tincturæ cinchonæ ʒi; decocti ejusdem ad ʒij. M. Sumat ʒij ter quotidie.

The eyes and forehead over the frontal sinus were ordered to be frequently fomented with warm water.

Oct. 12th. He was very much improved. There was less discharge; and the swelling of the lids was so much reduced that he could now partially open his eyes.

℞ Hydrargyri cum cretâ gr. ij; pulveris rhei gr. v. M. Fiat pulvis horâ somni sumendus.

The mixture was repeated, and the warm water continued.

Oct. 14th. The patient was going on well. The medicine was repeated.

Oct. 21st. He was now cured.

Case II. J. M., aged 3, was brought in October 10th, 1864, with catarrhal ophthalmia of both eyes, of one week's duration. The symptoms were similar to those of the last case. Three drachms of the mixture of ammonia and cinchona (as in Case I) were given three times a day, and an alterative powder at bedtime; and warm water was applied as in the former case.

Oct. 12th. The child was much better. The mixture and warm water were continued.

Oct. 17th. All pain and discharge were gone. The chemosis of the conjunctiva and swelling of the eyelids had entirely disappeared. The patient was ordered to continue the treatment for two or three days longer. The child was finally dismissed cured.

Case III. B. H., aged 16, applied October 12th, 1864, with catarrhal ophthalmia of both eyes, of four days' duration. She said she caught the complaint from a little brother. There was considerable congestion of the conjunctiva of both eyes, with the characteristic patches of extravasated blood. The discharge was but scanty. She stated that the attack came on suddenly; that she became worse towards night; and she complained of pain and weight in her head and forehead, especially over the frontal sinus, accompanied with some intolerance of light. The tongue was foul.

℞ Pilulæ hydrargyri, extracti hyoscyami, extracti coloc. comp., sing. gr. iij. M. Fiat pilula horâ somni sumenda.

She was ordered to take an ounce of the ammonia and cinchona mixture three times a day, and to apply warm water frequently to the eyes and forehead.

Oct. 14th. She was better. There was less congestion, little or no discharge, and less pain and intolerance of light. The mixture was repeated.

This patient did not apply again.

Case IV. H. B., aged 38, applied to Mr. Hancock October 17th, 1864, with catarrhal inflammation of both eyes, of five days' duration. The patient complained of great pain at night, and said that the attack came on suddenly. There was slight chemosis; profuse discharge; and the eyelids were much swollen. The ammonia and cinchona mixture was ordered to be taken in ounce doses three times a day.

Oct. 19th. There was no improvement. The mixture was repeated.

Oct. 21st. The patient was better. The eyes were less swollen; the pain and discharge much less. The mixture was repeated.

The patient continued to improve, and on the 28th was dismissed cured.

Case V. J. C., aged 43, applied to Mr. Hancock October 24th, 1864, with a very severe attack of catarrhal inflammation of both eyes, of a week's duration, which he attributed to exposure to cold. He stated that the attack came on suddenly, with a feeling as of grit in the eyes. There was now profuse discharge, with severe pain at times. The conjunctiva was of a deep red colour; and the chemosis was so great that the cornea appeared sunken and overlapped at its circumference by the irregular surrounding swelling. The lids were also so much swollen that he could not open his eyes. He was ordered to take an ounce of the cinchona and ammonia mixture, also five grains of compound ipecacuanha powder, three times a day.

Oct. 26th. He was much better in every respect. The bowels were confined. He was ordered to take two cathartic pills at bedtime; and to repeat the mixture and omit the powder.

Oct. 28th. He was still improving. The treatment was continued.

Nov. 7th. He had gone on well to this day, and was now dismissed cured.

ON CERTAIN FUNCTIONAL DISEASES OF THE RETINA.*

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Before commencing the immediate subject of this communication, it will be well to define, as clearly as we can, what we are to understand by the term "functional disease."

All disease is, in a certain point of view, functional in its manifestation. For, where no disturbance of function exists, either to the patient's or to the physician's senses, disease can hardly be said to exist, if we except what is understood by the term "latent disease"—disease so subtle in its character, so impervious to either the patient's or the physician's observation, as to elude all outward detection. But the term "functional disease" has, by a kind of common assent for a considerable period, been construed in a limited sense to mean a perversion of vital action, manifesting itself in subjective or objective symptoms, inconsistent with health, but unaccompanied by any change of structure in the constituents of the body—so that, when this is subjected to the analysis of our senses, we are unable to detect in it any departure from those conditions which we are accustomed to meet with in the normal organism. This—so to say—vital etiology of disease played, in days gone by, an important part in the doctrines of the age; so much so, as to have even originated a distinct school of medicine—Van Helmont's school of Vitalism—a principle supposed to preside over

* Strictly, for the word "retina", I should have substituted all the nervous structures concerned in vision.

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