A report of the cases attended at the Birmingham Eye Infirmary, during the year 1838 and 1839 / by Richard Middlemore, Esq.

A

REPORT OF THE CASES

ATTENDED AT THE

BIRMINGHAM EYE INFIRMARY,

DURING THE YEARS 1838 AND 1839.

BY RICHARD MIDDLEMORE, ESQ.,

SURGEON TO THE INFIRMARY.

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REPORT.

Acute conjunctivitis	280
Subacute conjunctivitis	131
Chronic conjunctivitis	66
Acute conjunctivitis, with pustule or ulcer of the cornea or conjunctiva	183
Acute purulent conjunctivitis	72
Catarrhal conjunctivitis	36
Irritable conjunctivitis	76
Strumous conjunctivitis	121
Erysipelatous conjunctivitis	11
Corneitis	48
Pannus, (generally connected with a granular state of the conjunctiva)	19
Opacity of the cornea	97
Staphyloma of different kinds and of various parts	13
Sclerotitis	35
Pterygium	6
Encanthis	3
Inflammation of the membrane of the aqueous humor	9
Acute iritis	52
Chronic iritis	17
Syphilitic iritis	11
Vacillation of the iris	4
Closed pupil	13
Choroiditis	5
Retinitis	13
Varicose ophthalmia	6
Cataract	45
Glaucoma	17

Fungoid and other tumours, either within the orbit, or within or upon the eye-ball	8
Dropsy of the eye-ball	5
Atrophy of the eye-ball	11
Ossification in various parts of the eye-ball	7
Amaurotic affections	106
Strabismus	9
Ptosis	5
Diseases of the lachrymal apparatus	46
Ophthalmia tarsi	83
Lippitudo	11
Hordeolum	13
Ectropium	10
Entropium	11
Tumours in the eye-lids	26
Inflammation, suppuration, or ulceration of the eye-lids	16
Adhesion of the eye-lid to the eye-ball	7
Wounds and other injuries of the eye and its appendages	100
Miscellaneous affections	278

Number of patients attended :—

Males	1065
Females	1164
Total	2229

CASE IN WHICH AN OPERATION FOR ARTIFICIAL PUPIL WAS PERFORMED ON AN EYE PREVIOUSLY AFFECTED WITH STAPHYLOMA OF THE CORNEA.

In the sixth volume of the *Transactions** I related the case of James Shephard, who became my patient at the Eye Infirmary, after having left the Birmingham Hospital, into which he had been admitted in consequence of a severe accident which had seriously injured his face and eyes. When I first saw him, the *right* eye was entirely collapsed. More than half the lower portion of the *left* cornea was extremely opaque and prominently staphylomatous, the pupil

* Page 450.

was almost entirely obliterated, and the iris extensively adherent to the upper margin of the staphyloma. The mode of treatment employed for the cure of the staphyloma consisted in the repeated tapping of the part by means of a fine iris-knife; it being evident that excision or any similar mode of cure would have unfitted the eye for the performance of an operation for artificial pupil, which presented the only chance of restoring to the patient any degree of vision. On the cure of the staphyloma, the patient, being still blind, was persuaded to go to the Bristol Asylum, where he was taught to make baskets. He remained there until June, 1839, when he returned to Birmingham, and called upon me, expressing a strong wish to have an operation performed. On this occasion he was led to my house by a little child, being unable to find his way, without assistance, about the streets of the town in which he had lived many years.

My experienced colleagues, Mr. Ledsam and Mr. Crompton, who examined the case with me, agreed that it was desirable to give the patient the chances of benefit an operation afforded.*

Operation.—August 6th, 1839. Present, Mr. Jones and Mr. Clarke.—Raising the upper lid without pressing upon the eye-ball, I made a small section of the cornea at its superior part, through which I introduced a fine iris hook, and very cautiously

* It will be borne in mind that *more than one-half* of the cornea, at its lower part, was densely opaque, the pupil nearly obliterated, the iris extensively adherent to the opaque cornea; but, from the slight glance of an exceedingly minute pupil which it was just possible to obtain, by looking downwards as the patient sat on a low seat, it was ascertained that the lens and its capsule were transparent.

drew out a portion of iris, which, as I could not excise it with the curved scissors without a risk of touching the capsule or dislocating the lens, I left to be strangulated between the lips of the incision of the cornea. The iris bled a good deal after the operation; but by keeping the patient quiet in bed, and by the adoption of various antiphlogistic measures, the effused blood was absorbed, acute inflammation was prevented, and the patient's vision so far restored that he has this day read to me, with tolerable ease, and without glasses, a portion of the former part of his case published in the sixth volume of the *Transactions*. The pupil I have made has a smooth margin, being formed, not by excising a portion of iris, but by detaching its pupillary margin from the staphymatous cornea, to which it was extensively adherent; it is of good size, being neither very large nor unusually small; it is somewhat oval in shape, and extends from the upper border of the staphyloma nearly to the corneal margin at its superior part, where I made the incision.

On reviewing the entire circumstances of this case, which I cannot but consider to possess various points of interest for the surgical practitioner and student, it has been my wish to ascertain if any proceedings different from those employed could have been adopted with a chance of conferring greater benefit on the patient. Would it have been possible by any other method to have removed the the staphyloma without injuring the transparent portion of the cornea, producing opacity of the lens and its capsule, or occasioning collapse of the eyeball? Or would it have been practicable, by the

employment of any other kind of surgical operation, to have restored a more perfect degree of vision? It was with a view to determine these questions that I submitted my patient to the inspection of the members of the medical section of the British Association at their last meeting, which took place three weeks after the performance of the operation; and I believe I speak with strict correctness in saying that, of the various distinguished individuals who were present, some of whom did me the honour to address me at the conclusion of the meeting, not one of them did otherwise than express the fullest satisfaction with every part of the surgical proceedings, which I had detailed with perhaps a tedious minuteness. I mention this circumstance only to express my disappointment that the experienced individuals in question did not suggest some improvement, or at least some alteration, in the management of cases of this nature, which, from their complicated character, and the difficulty of the operative proceedings now practised for their relief, are but too often unfavourable in their termination.

OSSIFICATION OF THE CRYSTALLINE LENS.

The subject of this rare form of disease is a silk dyer, named David Phillips. He is forty-five years old, and resides at Coventry.

History of the case.—About sixteen years ago he received a blow upon the left eye from a piece of turnip, which was purposely thrown at him. The eye was a good deal inflamed soon afterwards, and required treatment, which had the effect of relieving,

and, as he then thought, of curing him. About a year afterwards his friends perceived a *speck* in the eye ; at this time his vision was impaired, and was soon entirely lost. Lately the sight of the *right* eye has become dim, and on this account, as well as on account of the state of the *left* eye, he came to the Infirmary on the recommendation of my friend, Dr. Arrowsmith.

State of the right eye.—Pupil rather larger than natural ; movements of the iris sluggish ; vision by no means perfect.

State of the left eye.—A solid body is situated in front of the iris, in which are seen a number of densely white lines, radiating from its centre to its circumference. It has the shape and size of the crystalline lens. The eye is scarcely at all inflamed, but he says it feels very uncomfortable. Considering it desirable to remove this substance, (which I at once distinguished as the lens in a state of ossification,) as well with a view of preserving the vision of the right eye, as in the hope of benefiting the left, I proposed an operation, and through the kindness of Dr. Arrowsmith the patient was furnished with the means of remaining at the Infirmary.

Operation.—August 24th, 1839. Present, Mr. Crompton and Mr. E. Baker.—With Beer's knife I divided the lower part of the cornea quite as freely as in an ordinary operation of extraction, and in a few minutes, on making slight pressure upon the eye-ball, the ossified lens passed through the opening. In a fortnight the patient was able to return home. The pupil is circular and clear, the wound united, and vision slightly improved. The lens is

ossified throughout the whole of its texture, it is of its ordinary size and shape, has a radiated appearance, and is of a dirty white colour. It is added to my collection of preparations, illustrating the morbid anatomy of the eye, and constitutes a most perfect and beautiful specimen of this form of morbid change.

Remarks.—My impression is that the lens became opaque soon after the injury was inflicted, (sixteen years ago,) that it subsequently underwent the process of ossification, and that it finally became dislocated. Others have thought that the ossific change took place after the displacement of the lens; and, if I remember correctly, this was the opinion of Dr. Hodgkin, and also that of my esteemed friend Professor Owen, to both of whom I mentioned the case when I had the pleasure of seeing them at Birmingham a few months ago.

CASE IN WHICH ONE EYE WAS EXTREMELY LARGE FROM BIRTH.

James Bembridge, æt. 4. Left eye of ordinary size and dark colour.

Right eye.—The cornea is nearly double the size of that of the left eye; the anterior chamber amazingly ample, so as to equal in size an extreme case of dropsy of the anterior chamber. The pupil is large, and sluggish in its action. The cavity containing the vitreous humour is as large in proportion as that containing the aqueous humour. At the upper part of the cornea, and along its margin, there is a peculiar nebulous appearance, as though the cornea was seen through the conjunctiva

which was prolonged upon its surface, so as somewhat to overlap its margin. The boy has scarcely any sight with this eye; it is however free from inflammation, and by no means very painful. The lids are projected by the large globe; sometimes the right eye is rendered a little uncomfortable, and the appearance of the child is peculiarly disagreeable.

I have lately seen a similar state of eye in a patient attended by Mr. Royston, of Redditch. In this, as well as in Bembridge's case, I have recommended that nothing should be done unless the globe should continue to enlarge, unless it should give rise to irritation of the opposite eye, or unless the subject of the affection should after a time be anxious for an operation on the ground of personal appearance. I have in several such instances evacuated the aqueous humour with a fine cataract needle or iris knife, and in this way prevented the disease from increasing. In one instance I excised a small portion of the centre of the cornea, and with the effect of much lessening the size of the globe, but not of producing its diminution sufficiently to allow of the patient's wearing an artificial eye.

TUMOUR SITUATED AT THE CORNEA-SCLEROTIC JUNCTION.

Case 1.—William Davis, æt. 25, has a small tumour, about half the size of a pea, situated partly upon the cornea and partly upon the sclerotica, or, to speak more correctly, it appears to supersede a portion of the membranes, whose place and situation it occupies. It is of a dirty white colour, convex externally, of a firm texture, and apparently covered by conjunctiva, which cannot however be moved

upon its surface.* The tumour has existed from birth, and does not, he says, increase in size. He came to me, at the Infirmary, in consequence of the irritation produced by a few hairs which grew from a slight depression at the centre of the little tumour. These hairs are curved like the eye-lashes, are of the same colour, and about the same length, but are scarcely so strong. The presence of the hairs was first pointed out to him by a friend about a year ago; and even now they excite scarcely any irritation, except when the longest of them reposes on the cornea. On the extraction of the hairs all irritation subsided. I have requested him to procure a proper pair of forceps, and to remove them for himself whenever they are sufficiently long to occasion him any inconvenience.

Case 2.—John Underwood, fourteen weeks old, has a tumour, the size of a *small* pea, situated at the cornea-sclerotic junction, which has existed from birth. It is of a bright red colour, is firm to the touch, and possesses a smooth even surface. It does not appear to be placed *upon* the cornea and sclerotica, but to exist as it were in their stead, or rather in the place of those membranes to an extent equal to its own circumference. It does not at present appear to occasion any uneasiness or produce any inflammation, and of course I have not advised that it should be interfered with.

This is an extremely unusual defect. I have many times seen a tumour similar to that in the eye of Wm. Davis, (whose case has been just related,)

* Tumours of this description are represented with great accuracy in the works of Ammon, (just published at Berlin. Tab. 1, fig. 8–9); Wardrop (plate 4, fig. 3); and Demours (plate 64, fig. 1.)

which is of a dirty-white colour; and I have also seen tumours of a red colour, and possessing a granular surface, somewhat like a small mulberry; but it has rarely fallen to my lot to notice a disease such as exists in this instance. And here I may remark that in no instance which has fallen under my observation has the disease existed in both eyes. I believe that in cases like the present we had better not interfere, at least with a view of removing the mere personal defect about which parents are generally very anxious. They seldom give rise to much inconvenience, or increase in any material degree. In one instance, somewhat similar to this, an attempt was made by a surgeon to remove the disease by shaving the prominence it occasioned down to the level of surrounding parts, and the result of this improper proceeding was suppuration of the eye-ball.

LARGE TUMOUR PRODUCED BY THE ESCAPE OF THE VITREOUS HUMOUR BENEATH THE CONJUNCTIVA.

Joseph Hill, æt. 19, received a blow upon the eye about six years ago, on account of which he applied to a surgeon, who, after the lapse of several weeks, succeeded in removing the inflammation excited by the injury, but was unable to preserve the sight of the eye. About two months ago he received a slight injury of the same eye, which produced a small swelling, which has rapidly increased until it has acquired its present size.

State of the eye.—Cornea slightly opaque, particularly at its temporal side; pupil closed. At the outer side of the cornea there is a tumour as large

as a good-sized walnut, which evidently contains fluid. It appeared to me that the last injury had divided the sclerotica to a limited extent; that the vitreous humour had escaped beneath the conjunctiva, and collected until it had distended the part so as to form the large tumour in question.

Operation.—I introduced a fine cataract needle into the swelling, discharged a quantity of thin pale yellowish fluid, and then directed the patient to close the lids, upon which I passed a fine roller so as to prevent them from being opened, and requested him to keep the part quiet for a few days, to take a little aperient medicine, and confine himself to low diet. In a few weeks the eye was pretty much in the condition it had been previously to the last injury.

Remarks.—I relate this case because it had been proposed, before I saw the patient, to remove the whole tumour, on the supposition, I suppose, that the disease was staphyloma of the sclerotica; and, secondly, because I firmly believe that many needlessly painful and extensive operations are performed upon the eye for want of that careful investigation which is indispensably necessary, in many cases of unusual occurrence, to the establishment of correct diagnosis. During the past year I have met with a case in which a lens dislocated into the anterior chamber was mistaken for one of hypopium; another, in which the lens had passed through a rent in the sclerotica, and was allowed to remain beneath the conjunctiva, producing a degree of irritation which had nearly destroyed the vision of both eyes, in consequence of the surgeon in

attendance not sufficiently investigating, perhaps, indeed not understanding, its nature; a third, in which a rent in the sclerotica had permitted the escape of the vitreous humour beneath the conjunctiva, so as to project that membrane enormously, and for which an operation for sclerotic staphyloma (namely, extensive excision,) was proposed; a fourth, in which the appearance produced by neglected and protracted inflammation of the choroid coat led to the conclusion that the eye was the seat of melanosis, for which the extirpation of the organ offered the only chance of preserving the patient's life. In short so many errors of a somewhat similar character have passed under my observation during the last few years, that I cannot forbear, at the hazard of any imputation to which the suggestion may expose me, to remind my provincial brethren that ophthalmic pathology has not yet received a due share of attention.

PORTION OF TOBACCO-PIPE IN THE ORBIT.

Walter Totty received a thrust just below the right eye from, as he supposed, the point of a stick. He had the part fomented and poulticed, and on the following morning he called upon Mr. Wright of this town. Mr. Wright tells me that the part was much swollen and inflamed, and that he perceived a small wound about the sixth of an inch below the tarsal margin of the lower lid, midway between its inner and outer canthus. He advised the application of leeches, soothing fomentations, and bread poultice, together with aperient medicine and low diet. In a few days the external inflammation

declined, but partial ptosis had occurred; the pupil was large, and vision was wholly destroyed. At this period (ten days after the receipt of the injury,) Mr. Wright requested him to call upon me: he came, and brought with him a piece of tobacco-pipe, one inch and three-eighths long, which he told me had been forcibly projected from the small wound beneath the lower lid whilst violently sneezing just before he set out from home.

It appears that being ashamed of the mode in which he met with the accident, he was unwilling to tell Mr. Wright the particulars, and, in some respects, deceived him. He had quarrelled with a man, whose daughter he had some time before seduced, and had afterwards gone home. The man followed him and used such violent and threatening language that my patient, who had locked his door, became alarmed, and went to the key-hole "to beg him to be civil," when he met with the injury,—his enemy thrusting a tobacco-pipe through the opening and wounding him as explained.

Appearance of the eye.—The eye-ball does not appear to have been wounded, or to be larger or more prominent than the other. The pupil is large, somewhat cloudy, and quite immoveable. There is slight ptosis, and the movements of the globe are impaired. The treatment employed has not had the effect of restoring vision.

Remarks.—I have never before noticed in the course of my practice so large a foreign body to have been thrust into the orbit, and to have remained there for so long a time, without producing a greater degree of irritation. Perhaps the shape and smooth-

ness and position of the substance introduced may, in this instance, explain the circumstance.

PARTIAL DISLOCATION OF THE LENS THROUGH A RENT IN THE SCLEROTICA.

Sarah Hanson, æt. 55, received a blow upon the eye whilst breaking a stick.

State of the eye two days after the occurrence of the accident.—Small tumour at the nasal side of the sclerotica, a little behind its junction with the cornea, which is covered by the conjunctiva. The pupil is drawn in the direction of the tumour as though a portion of the iris were absorbed. One part of the margin of the lens is seen to occupy a great portion of the pupil, the other is placed behind the corneo-sclerotic junction, and is covered by the conjunctiva, which is of a dark-red colour, from the effects of the recent contusion.

Operation.—Lens readily removed by a free division of the conjunctiva.

After-treatment.—A light roller was passed around the lids, which were carefully closed. The patient was directed to keep her bed, and to take a little aperient medicine. No severe inflammation occurred after the operation, and in the course of a few weeks the patient was so far recovered that I made the following entry in my case book:—"*Cornea* clear, *pupil* a little drawn towards the lacerated opening in the sclerotica, *vision* extremely imperfect."

Remarks.—In this instance the nature of the case was pretty easily detected in consequence of a portion of the margin of the lens being seen through

the pupil ; but the disease is more liable to be misunderstood when the whole of the lens has passed through the sclerotic opening, and is lodged beneath the conjunctiva.

INJURY TO BOTH EYES FROM A PERCUSSION CAP.

Samuel Oakes, æt. 30, a brass-founder, received an injury to both eyes from a percussion cap which he had struck with a hammer, with a view of amusing his shopmates.

State of the right eye when I first saw him, rather more than half-an-hour after the accident occurred. —The cornea was extensively lacerated in various directions ; the iris protruded at two or three points ; the lens cloudy ; the eye red and extremely painful ; but no portion of the percussion cap could be seen.

State of the left eye.—Small section of the cornea, aqueous humour escaped, iris fallen against the opening in the cornea, small portion of percussion cap perceived just behind the iris.

Treatment.—The early treatment consisted in free depletion. Extreme chemosis occurred in the right eye, requiring free scarification, soothing lotions, &c. In the course of a few days a small portion of the percussion cap was perceived, which was readily removed with a forceps, and the eye soon became atrophied and tranquil. The left eye required a little further attention ; but by the aid of calomel, rest, low diet, and cooling lotions, it was rendered tolerably strong five weeks after the accident took place. However, although his sight is very good, there still remains a slight opacity of the cornea at the point where the percussion cap en-

tered, and the iris is adherent at that point to a limited extent. He is now at work for Messrs. Taylor and Loach, brass-founders, in this town.

Remarks.—I select this case from a variety of others, not because its result is more successful, but with a view of showing that injuries of this nature are, as a general rule, best managed by careful efforts to prevent, or, if occurring, to relieve inflammation, rather than, by the adoption of a practice, which I believe to be more customary than correct, involve the risk of destroying vision by meddlesome and officious attempts to remove the foreign body, when, as happened in this case, it has passed into the anterior chamber.

A PIECE OF STEEL IN THE ANTERIOR CHAMBER IN CONTACT WITH THE IRIS.

John Pugh, æt. 32, tool-maker. Whilst at work, a portion of hard steel was detached from a punch, and forcibly struck his left eye. Two days afterwards he called upon me, when I made the following notes of his case :—" Pupil clear, but contracted ; its mobility somewhat impaired ; iris dull and in a state of inflammation ; at its temporal side and in its anterior surface a small portion of metallic-looking substance may be perceived, which he tells me is a portion of hard steel detached from a punch with which he was working."

Treatment.—Bleeding, mercury to the production of moderate ptyalism, cooling lotions, and low diet.

Result.—After remaining on the books little more than a fortnight he was discharged, his eye being quite well, with directions to return if a relapse of inflammation should take place.

The metal is still to be seen in contact with the iris, but his vision is as good as it was prior to the accident. The only difference of any sort which can be perceived is, that when the pupil is expanded that portion of the iris with which the metal is in contact (the anterior surface and temporal side of the iris) appears to be paralysed, so that the pupil possesses a shape very much like the letter D.

This is another instance exhibiting the good effects of making no effort to remove a foreign body by a surgical operation, when it has completely passed into the anterior chamber.

EXTENSIVE BULGING OF THE SCLEROTICA WITHOUT LOCAL INJURY OR ACUTE INFLAMMATION.

The fifth volume of *Transactions** contains the case of Louisa Chatwin, who suffered from what, in the absence of a better term, I called a bulging of the sclerotica. Since that time the enlargement has disappeared; there is no appearance of morbid prominence of the sclerotica, and the eye has shrunk to its natural size. The other eye has suffered from inflammation on various occasions since its fellow became diminished in size, which however has always been manageable by treatment. I have seen this occurrence repeatedly, but have as yet had no opportunity of dissecting the eye of a patient suffering from the malady. My present impression is, that it arises from a secretion of fluid, which takes place very slowly, either between the retina and sclerotica, or between the retina and the choroid, at some limited point, and that the increasing enlarge-

* Page 399.

ment of the sclerotica takes place as this fluid augments in quantity, whilst its diminution occurs when, from any circumstance, it becomes wholly or partially absorbed. This subject, (by which I mean the particular form of disease now described with its attendant circumstances as now detailed,) is not referred to by systematic writers on diseases of the eye, so that I have examined their works for information in vain, neither have I been more successful in my enquiries among my professional friends. The disease in question will be distinguished from that pouchiform varicosity of the choroid vessels, (a frequent consequence of chronic inflammation of the tunica choroidea), which produces a number of small bluish prominences at various parts of the sclerotica, but chiefly at that part near the margin of the cornea; whereas the sclerotic enlargement is generally of large size, possesses an equal surface, is confined to one spot, exists at some distance from the margin of the cornea, and is either not discoloured at all, or only so in the slightest possible degree.

MELANOTIC GROWTH FROM THE SEMILUNAR MEMBRANE.

In the fifth volume of the *Transactions** I related the case of Mrs. Banister, for whom I removed a small melanotic growth attached to the semilunar membrane. This growth never reappeared, neither did the eye become the seat of melanosis, although this disease existed in various other organs and tissues to an extent which eventually destroyed life.

* Page 395.