

CHAPTER IV.

DISEASES OF THE EYELIDS.

Wounds and Injuries—Inflammation—Ulceration—Tumours—Paralysis—Spasm—Abnormal position of eyelids and eyelashes—Entropium—Ectropium—Trichiasis—Adhesions—Œdema—Emphysema—Styes—Tinea ciliaris—Lice—Herpes—Chrom-hydro-sis.

WOUNDS AND INJURIES.

CONTU-
SIONS.
A "black
eye."

Treatment.

Arnica.

Rest.

CONTUSIONS OF THE EYELIDS.—A blow on the edge of the orbit or eyelids is apt to be followed by considerable swelling and ecchymosis of the part, a "black eye" being the result. We are frequently consulted in such cases, in order, if possible, to prevent the disfigurement caused by a bruise in this conspicuous part of the face. If the patient applies to us soon after the injury has been inflicted, and before any considerable amount of blood has become effused into the loose cellular tissue of the part, we may generally prevent any further ecchymosis by the application of a piece of lint soaked in a mixture of tincture of arnica and water (one part of the former to eight of the latter), which should be kept constantly applied to the eye; "it promotes the absorption of effused blood, prevents discoloration, and relieves pain and stiffness;"* or a solution of muriate of ammonia, acetate of lead, or ice may be used in the same way; but under any circumstances the eyelids should be kept closed and at rest.

Ecchymosis of the eyelids may be the remote effect

* "Elements of Materia Medica," by W. Frazer, 2nd edit., p. 278.

of a far more serious injury, and thus it may become a very important indication in cases of blows on the head, where one or more of the bones forming the walls of the orbit have been fractured. In these cases, the position of the primary injury and the tense, swollen, and purple colour of the eyelids, together with the gradual advance of the ecchymosis, point but too clearly to the serious nature of the lesion that has taken place, the blood having been effused under the ocular conjunctiva into the cellular tissue of the eyelid from the seat of fracture. It follows, therefore, that if the lower wall of the orbit is fractured, the ecchymosis will first be noticed beneath the conjunctiva of the lower hemisphere of the globe of the eye, and in the lower eyelid; and conversely, in cases where the orbital plate of the frontal bone has been fractured, it will appear in the upper lid and conjunctiva. In instances of this description, the ecchymosis is but a very small matter, and is worthy of attention simply throwing some light on what might otherwise be an obscure case of injury.

WOUNDS OF THE EYELIDS.—In simple incised wounds of the lids, the edges of the wound must be brought into apposition with one or more fine silk or silver-wire sutures, and cold-water dressing subsequently applied. The sutures may be removed after two or three days; but until then it is advisable to close the lids with a compress and bandage, the parts being kept perfectly at rest. I need hardly say that an apparently simple cut in the eyelid may be only the external indication of a wound which has penetrated deeply into the orbit; nor need I repeat the caution already given against a too hasty and favourable prognosis in such cases.

Incised wounds of the eyelids, by dividing the fibres of the levator palpebræ, may destroy the action of the muscle, and render it impossible for the patient to raise the eyelid. In some few cases injury to the lids or supra-orbital region, either from a contused or incised wound, has been followed by paralysis of the levator palpebræ. In other cases, not only has ptosis come on, but this has been attended by gradual loss of sight. In order to explain this connexion, we may presume that some of the branches of the fifth nerve have been injured, that the irritation has extended

Ecchymosis
of the lids
in fracture
of the
skull,

an aid to
diagnosis.

WOUNDS.

Simple.

Sutures
required.

May mark
a deeper
injury.

May cause
ptosis and
loss of
sight,

from in-
jury to
5th nerve.

thence to the ophthalmic ganglion and carotid plexus, and ultimately involved the sympathetic in the morbid action; a permanently engorged state of the capillaries being thus induced, which interferes with the nutrition of the nervous elements, these become atrophied, and the result is the condition above noticed. However this may be, it is well to bear in mind the fact, that even apparently trivial injuries to the eyelids are sometimes followed by paralysis of the levator palpebræ, or by total loss of sight in the injured eye. Instances of this kind are not to be confounded with those depending upon detachment of the retina, consequent on a blow or fall on the eye; in these cases the loss of sight occurs immediately after the accident, and the ophthalmoscope will generally enable us at once to detect the nature of the injury.

Lacerated wounds,

In the case of lacerated wounds of the eyelids, there may be a little more difficulty in adapting the torn edges of the wound to one another. Having previously been cleaned from foreign substances or clots of blood, they should be brought as accurately together as possible, and retained there by means of sutures, otherwise an ugly scar may result, or a cicatrix of considerable extent, which by subsequent contraction may evert the lid to a greater or less degree. Occasionally, from inattention to these apparently trivial matters, the edges of the wound do not unite, and a slit or button-hole opening through the lid remains.*

require care.

BURNS.

BURNS.—The eyelids are sometimes damaged by fire, or the explosion of gunpowder, or other combustible material. Our chief care under these circumstances must be to prevent, if possible, the formation and contraction of a cicatrix, which is certain to occur unless the greatest care be taken in dressing the wound. A piece of lint soaked in oil or glycerine containing carbolic acid should be applied over the injured lid, together with a compress and bandage, so as to keep the lids well stretched over the globe of the eye until the wound has healed. The dressing may be changed two or three times a day, the wound being bathed with warm water from time to time, but over-anxiety to see it look clean is often attended with ill consequences.

Mischief from cicatrices.

Method of dressing.

* Lawrence "On Diseases of the Eye," 2nd edit., p. 89.

It will be well especially to avoid rubbing or daubing the surface of such a wound with a sponge or wet rag: simply changing the dressing night and morning, and reapplying the pad and bandage, will be quite sufficient.

Should the edges of the lids be excoriated, they are very apt to grow together, particularly at their inner and outer angles; the eye must then be opened more frequently, and the lids should be separated from one another as far as possible, so as to break down any adhesions that may have formed; the margins of the eyelids must be smeared with an ointment composed of equal parts of glycerine and starch boiled together, cacao butter, or any similar substance, not likely to excite irritation, but which will prevent the raw edges of the lids from coming in contact. In the majority of these cases it will be necessary also to employ a compress, as the free margins of the lids are hardly likely to be injured by mechanical or chemical agents, without the integument covering the eyelids also suffering.

Adhesions between the lids;

How prevented.

INFLAMMATION OF THE EYELIDS.

ERYSIPELAS.—The skin of the lids is liable to be attacked by phlegmonous or erysipelatous inflammation, the latter usually extending from the parts around, and not uncommonly following exposure to cold, or suppuration of the lachrymal sac.

ERYSIPELAS OF THE LIDS.

In these cases the lids become red, swollen, and tense; usually a number of small vesicles form on the inflamed surface of the skin, and bursting, give exit to a sero-purulent fluid. The patient complains of a tingling, burning feeling in the part, but seldom of deep pain, unless the cellular tissue of the orbit is affected; he is feverish, his tongue is foul, and the pulse usually feeble. In the majority of instances, the inflammatory action soon subsides and the parts return to their normal condition; but in severe cases the disease extends backwards to the orbit, and may, as I have before described, induce blindness by involving the optic nerve; under any circumstances, in bad or neglected cases of erysipelas, the cellular tissue sloughs and comes away in shreds, often damaging the muscular apparatus of the lid, or destroying a sloughing.

Redness, Swelling, Vesicles.

Pain.

May cause a sloughing.

considerable portion of the skin, and thus giving rise to ectropium.

Treatment.—In erysipelatous inflammation of the lids, it is advisable to paint the skin over with a solution of nitrate of silver (ʒj to an ounce of water) in the early stages of the disease. This application should extend beyond the limit of the inflamed skin, so as if possible to prevent the diseased action from extending; cold compresses may subsequently be applied. If suppuration has occurred, the skin and cellular tissue of the lids must be freely incised, and subsequently poultices applied, the integument surrounding the affected part having been painted over in the first instance with the tincture of muriate of iron. This medicine should also be administered internally, together with stimulants and beef-tea, as described in instances of erysipelas of the cellular tissue of the orbit.

If erysipelas of this severe type has begun in the eyelids, which it seldom does, it is almost certain to extend to the neighbouring structures, involving the contents of the orbit and spreading to the scalp, though doubtless the early and free application of nitrate of silver over the affected part may happily stop the advance of the disease.

PHLEGMON.

Ends in abscess.

PHLEGMONOUS INFLAMMATION most commonly attacks the upper lid, which becomes red, swollen, and of brawny hardness; in this stage it is exquisitely painful, but in the course of a few days matter forms, and finding its way to the surface, the abscess bursts, and to the great relief of the patient and the rapid abatement of the symptoms.

Treatment.

Arg. nit.

Poultice.
Open
abscess.

Treatment.—If in the early stages of these cases the inflamed part is painted over with a strong solution of nitrate of silver, the advance of the disease may occasionally be prevented; but if suppuration is imminent, poultices must be applied, and the abscess opened as soon as possible, our main object being to prevent the pus from burrowing into and destroying the cellular tissue of the lid, thereby perhaps inducing an extensive cicatrix and ectropion. It is advisable, in making an incision into an abscess of this kind, to cut from within outwards, or in the direction of the fibres of the orbicularis muscle.

SYPHILITIC
ULCERATION.

SYPHILITIC ULCERATION of the eyelids may be the effect of either primary or secondary syphilis. The

diseased action in the former class of cases usually commences in the conjunctiva, the virus having been directly applied to the part; from this point it gradually invades the skin, and in fact the whole thickness of the lids.

Primary
chancere.

Syphilitic ulceration of the eyelids is, however, more commonly a secondary affection:* I have seen several undoubted instances of the kind, in which the nature of the disease had not been recognised until a very considerable portion of the lid had been destroyed. Under these circumstances the ulceration usually commences at the margin of the lids: at first the skin only is involved, but in the course of time the tarsal cartilage and other structures are affected, so that the whole thickness of the lid is implicated in the ulcerative process; the edges of the wound become everted and thickened, and there is a constant discharge of bloody matter from its surface.

Secondary.

Extends to
whole of
eyelid.

The patient seldom complains of much pain in the part, the progress of the affection being generally very slow; but should the individual be in a weak and emaciated state on the invasion of the disease, it may then make rapid strides, speedily involving the entire eyelid, and causing much greater suffering. In some cases the ulceration is comparatively superficial, the skin alone being affected; in these instances, the course which the disease takes is generally remarkably protracted, and often almost painless. In cases, therefore, where a patient has been suffering from long-continued but steadily advancing ulceration of the eyelids, which has resisted all ordinary methods of treatment, we shall very probably discover that it depends upon a syphilitic taint. The previous history of the case and the concomitant symptoms will, of course, assist our diagnosis.

Progress
slow.with few
exceptions.Resists
ordinary
treatment.

Treatment.—It is urged by most surgeons that, whether depending upon primary or secondary syphilis, the best method of treating these cases is by mercury, judiciously and cautiously administered. But it is certainly often necessary to abstain from specific treatment in the first instance, more especially if the patient is in a low state of health; and according to my expe-

*Treatment.*Mercury at
discretion.

Cod-liver oil, pure air.

rience, good food, a generous dietary, cod-liver oil, pure air and exercise, are as necessary as mercury for the cure of these cases. When, however, the patient is in a fit state of health to be put under specific treatment, the hydrarg. c. creta, combined with soda and quinine, is what I usually prescribe; its action being carefully watched, and the mercury discontinued on the first indication that the system has become affected. In many respects mercurial vapour baths afford a preferable method of administering the drug; but as they sometimes tend to exhaust the system, by the increased action of the skin which they occasion, this is an objection to their use where the patient has been previously in a feeble state of health. Under these circumstances we may conveniently order the mercurial ointment to be rubbed into the patient's arm-pits and thighs night and morning, until the ulcer assumes a healthy appearance, which will usually be the case before the constitutional effects of the drug are apparent.

Mercurial vapour baths.

Local applications.

Probably the most suitable local application we can employ for the ulcers is a lotion composed of five grains of carbolic acid to an ounce of glycerine. Black-wash is often very useful, or an ointment composed of ten grains of sulphate of copper to an ounce of simple ointment.

Change of air and scene.

A change of air and scene should always if possible be obtained, for the chances are that our patient is in a depressed and nervous state as to his condition, especially if he is aware of the cause of it; and to relieve this, there is nothing like variety of scene and occupation, the mind being thus prevented from dwelling too much upon the disease.

Ulcers from inherited syphilis.

Infants of a month old and under, the offspring of syphilitic parents, sometimes suffer from pustular eruptions about the corners of the mouth and eyelids, as well as the anus; the pustules burst, and a scab forms, beneath which an indolent ulcer appears. These children are usually little, puny, wizen-faced creatures, whose lives it is hardly possible to preserve. Their best chance is in a good healthy wet-nurse; and as soon as practicable their arm-pits and thighs should be rubbed every other night with the blue mercurial ointment. The effects of the medicine on the system may be estimated by the amelioration which usually

takes place in the condition of the sores; directly the ulcers begin to heal the ointment should be discontinued for a time, but the action of the drug on the system must be prolonged for a considerable period after the ulcers have all healed.

HERPES ZOSTER.—The skin of the lids, like that of other parts of the body, is sometimes affected with impetigo, leprosy, vitiligo, eczema, and herpes. These require no special notice, except perhaps the last, in which the deeper structures of the eye itself are sometimes affected.

HERPES OF THE EYELIDS.

Herpes zoster is not uncommonly mistaken for erysipelas of the eyelids. Herpes frontalis, however, is always confined to one side of the median line, the eruption appearing only over that portion of the skin which is supplied by the ophthalmic division of the fifth nerve; the vesicles never form, therefore, over the patient's cheek. The pustules are small and numerous; they often, however, become confluent, and their contents dry up into a scab, which subsequently falls off, leaving a scar very much like that seen after small-pox. There is less constitutional disturbance in herpes than in erysipelas. On the other hand, the patient is affected with a peculiar numbness, mingled with pain which is often very severe, and precedes the eruption, the heightened sensibility continuing long after the inflammatory outburst, not passing beyond the median line. The nerves of sensation appear to play an important part in herpes zoster; the peripheral distribution of the fifth, from cold or some such cause, becomes inflamed, and "the eruption succeeds as the result of an extension of the vascular excitement of the cutaneous tissues anatomically related to this network."

Distinguished from erysipelas.

The intolerable pain in these cases is perhaps best relieved by a subcutaneous injection of atropine or morphia, as near the supra-orbital foramen as possible. The extract of belladonna and sulphate of quinine may be administered internally, and the acetate of lead lotion applied over the inflamed portion of the skin. In some cases, however, these means fail to remove the pain, and it has even been recommended to divide one or more branches of the nerve, a method of treatment I have certainly never had to practise in cases of this kind.

Pain relieved by atropine.

Mr. Hutchinson holds that if the forehead only is

The iris sometimes affected.

Limitation to nerve districts.

affected, although there will be eruption on the upper eyelid, yet the eye will not suffer. If the eruption appears on the upper part of the nose, there will be slight iritis; while if the tip is affected, the eye will suffer severely. These differences he explains by reference to the anatomical distribution of the ophthalmic division of the fifth nerve, by which the disease is localized. The branch which supplies the tip of the nose is the one which supplies also the ophthalmic ganglion, and through it the structures of the eye.* After the acute symptoms of the disease have passed away, dark brownish scars frequently remain to mark the site of the eruption; their colour subsequently fades into that of the skin around them, but the scars themselves remain like those of small-pox, during the remainder of the patient's lifetime.

CHROM-HYDROSIS.

CHROM-HYDROSIS consists in the supposed excretion of an indigo-blue material from the surface of the eyelids. The colouring matter is easily removed by oil or glycerine, but not by water. This disease mostly occurs among women whose menstruation happens to be disordered, and their general health more or less impaired.

In hysterical subjects.

Authentic case.

A remarkable case of this kind is related by Warlomont,† which was made the subject of most careful investigation, and every means taken to prevent the practice of any deception on the part of the patient; still, the case is hardly satisfactory, and cannot be regarded as affording unequivocal evidence of the existence of this most singular disease, and doubts still exist on the matter. Most surgeons are of opinion, and I certainly agree with them, that chrom-hydrosis is an invention of hysterical patients, the colouring matter having been applied by their own hands, and being no excretion at all from the skin of the eyelids.

XANTHELASMA PALPEBRARUM.

XANTHELASMA PALPEBRARUM.—These buff or yellow patches, not very unfrequently seen near the inner

* *Med. Times and Gazette*, Oct. 19th, 1867, p. 432; see also remarks and cases by Mr. Bowman, *Oph. Hosp. Reports*, vol. iv. p. 1, 1867.

† *Ophthalmic Review*, vol. ii. p. 170.

angles of the eyelids, give the patient considerable uneasiness on account of their appearance. The subject has for some time past engaged the attention of Mr. Hutchinson. He has arrived at the conclusion—

That xanthelasma never occurs in children; whilst it is fairly common in middle and senile periods of life. Mr. Hutchinson's observations.

That in a small proportion of very severe cases, jaundice, with great enlargement of the liver, is met with.

The form of jaundice is peculiar, the skin becoming of an olive-brown, or almost black tint, rather than yellow, and the colour being remarkable for its long persistence.

In many cases in which there has been no jaundice, there is yet the history of frequent and severe attacks of functional disturbance of the liver.

Xanthelasma occurs more frequently in females than in males, the proportion being two to one.

In all cases the xanthelasmic patches appear in the eyelids first; and not in more than about 8 per cent. do they ever extend to other parts.

The patches invariably begin near the *inner* canthus, and almost invariably on the *left* side.

It is probable that of the causes mentioned, under which the pigmentation of the eyelids may be disturbed, disorder of the liver is the most powerful; hence the fact that the more extensive cases are usually associated with hepatic disease.*

TUMOURS OF THE EYELIDS.

EPITHELIAL CANCER.—The lower lid seems to be peculiarly susceptible of this form of disease; it seldom appears before an individual has reached the age of forty, and may commence as a small wart-like growth in the skin over the lachrymal sac, and gradually extend to the lower lid. At first the affection appears so insignificant, and so closely resembles an ordinary wart, that probably little notice is taken of it. After a time, however, the pimple or wart-like growth ulcerates, and a small indolent sore, with raised edges and a glassy-looking surface, appears. A wart at first.
Subsequent ulcerations.

* *Lancet*, vol. i. 1871, p. 410.

Sooner or later other ulcers form near the original one, and, running together, an unhealthy sore, with a red uneven base, results. The disease advances very slowly, and the original sores often appear for a time to have healed, a thin cicatrix forming over them, but which is soon broken through by the exudation of a serous fluid from the ulcerated surface. After a time the diseased action extends itself deep into the corium; it is not always attended with pain, but a tingling, itching feeling exists in the part. The disease also spreads laterally, gradually involving the lower lid, and skin of the cheek, in a mass of ulceration, from the surface of which there is a constant sanious discharge.

The ulcers in their early stages often appear dotted over with a number of little granules, in appearance like millet seeds, or boiled grains of sago; but the essential feature of the disease in this situation consists in the abnormal production of cells; these are generally nucleated, flattened, thin, and scale-like; for the most part being round or oval in shape, their outline irregular, at some parts linear or angular, or extended in processes. They may be recognised under the microscope from an early period of the disease.*

The importance of forming a correct diagnosis in cases of this description cannot be over exaggerated; for epithelial cancer, situated in any accessible part of the body, may be effectually cured, if completely extirpated by means of the knife in its early stages. Epithelioma might be mistaken for syphilitic, lupoid, or rodent ulceration; the two former are amenable to medical treatment; the latter, like epithelial cancer, can alone be cured by removing the whole of the diseased structure.

Some years ago, I was consulted by the late Rev. A. S., of Tirhoot, on account of a small wart-like growth about the size of a split pea, situated on the skin at the inner angle of the left eye; its surface was ulcerated, and there were several millet-like bodies scattered over the base of the sore. Mr. S. told me he had then been troubled with this spot for some eighteen months, and that it would not heal. His father had died from what

Advance slow.

Little pain.

Extends in depth and breadth.

Characteristic cells.

Diagnosis most important.

Illustrative case.

History.

* *Ophthalmic Review*, vol. i. p. 270. Cases from Arlt's Clinic.

appeared to have been cancer of the face. I scraped away a little of the tissue from the surface of the ulcer, and having placed it under the microscope, found distinct evidence as to its nature; and I therefore at once removed the abnormal growth, carefully excising a portion of the sound skin round it, and also the subcutaneous structure upon which it grew. At the time of my patient's death, which occurred from fever some five years after the operation, there had been no return of the disease. I mention this case to show the importance of making an early examination of the elementary structures of a morbid growth of this kind.

In the more advanced stages of epithelial cancer—in fact, when the whole of the eyelid and part of the cheek have become a mass of disease, it is still advisable to remove it, applying a strong solution of chloride of zinc to the surface of the wound. Apparently hopeless cases are recorded, in which this practice has been followed by satisfactory results. If the disease is left to run its own course, the patient must inevitably sink under it.

SCIRRHUS and other forms of cancer occasionally spring from the eyelids, but as they differ in no respect from similar growths in other parts of the body, it is not necessary for me to follow up the subject in this work.

Rodent cancer most frequently attacks the skin of the lower eyelids, but I never remember seeing a case of the kind among the natives of India; the disease usually begins as a dry wart, and after the excrescence has been shed several times the skin ulcerates. The ulcer spreads, involving all the neighbouring structures; it has usually a well-defined border; the surface of the sore is devoid of granulations, and glazed. There is very little discharge from the ulcer unless it happens to become inflamed. Rodent ulcer seldom appears until after middle age. The disease must be entirely removed by means of the knife, and the surface of the wound subsequently smeared over with the chloride of zinc, so as if possible to destroy the whole of the morbid growth.

WARTS not unfrequently grow from the skin of the lid, and if near its free margin, they may press upon, and bend some of the cilia inwards against the eye-

Early removal successful.

Later removal.

SCIRRHUS.

Rodent cancer.

WARTS.