

wound to support the splint; over the wound-area a sterilized wire gauze is placed, supported by the pads at either end to prevent pressure, and made occlusive by covering it outside with sterilized gauze. Hæmostasis is not secured by compressing-dressings and tight bandages, but before the dressing is put on the limb is elevated and moderate pressure made with gauze tampons, which suffice, after a short time, to still the bleeding. The elevated position is then continued for several days. The wound is dressed but once or twice for the removal of the stitches. The absence of pressure relieves the patient from pain, while the absence of dressing in immediate contact with the wound makes the dressing easy and free from pain to the patient. This dressing has also the advantage, as in many other dressings of this form, that while preventing irritation of the wound by the entrance of extraneous matter, it also prevents the irritation which arises from the contact of the dressings with the wound.

OPHTHALMOLOGY.

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Eucaine in Ophthalmic Practice.—BEST (Giessen) found that a 4 per cent. solution of the hydrochlorate of eucaine is to be preferred for anæsthetizing the cornea. At least four drops are necessary. The solution can be sterilized without decomposition, and may be kept sterile by the addition of formal. Burning pain follows the instillation of even weak solutions (1 per cent.), especially if corneal inflammation exists, and each fresh drop is painful, though to a less degree. There is decided congestion produced, both conjunctival and ciliary. The pupils of both eyes contract for several minutes (reflexly from the sensory irritation). The conjunctiva is not so sensitive as the cornea; it is only after the solution has reached the latter that the severe burning is experienced, for relief of which cocaine has to be employed. These unpleasant effects are, however, not so pronounced in all cases. The anæsthesia is pretty complete, though to a less degree than that produced by cocaine in like strength, and it occurs somewhat earlier (after about six minutes) and is of shorter duration (fifteen to twenty minutes).

Widening of the commissure and dilatation of the pupil are absent; but this is true to a certain degree only, so far as the pupil is concerned. While the usual quantity does not affect the pupil, larger amounts (ten to twelve

drops of a 4 per cent. solution) cause dilatation of 1 to 2 mm. in man. Animals of different species exhibit remarkable differences as regards the action of the drug upon the pupil. Dogs resemble men; rabbits showed only $\frac{1}{2}$ to 1 mm. of dilatation; while guinea-pigs react to eucaine as to cocaine in this respect. The accommodation is not affected. Eucaine, like cocaine, causes opacity of the superficial layers of the cornea. Like cocaine, it diminishes tension slightly. An increased rate of diffusion from the conjunctival sac into the anterior chamber is caused by both—*e.g.*, the effects of pilocarpine or atropine occur earlier and last longer in eucainized eyes. Attention is called to a number of points of analogy between the effects of section of the trigeminus (permanent anæsthesia) and those after local anæsthetics (temporary anæsthesia).

Best concludes that while eucaine might be preferred in certain operations where dilatation of the pupil or ischæmia of the vessels is not desired, it will not displace cocaine on account of the pain it causes.—*Deutsche med. Wochenschrift*, vol. xxii. No. 36.

Rupture of the Iris from Contusion of the Eyeball.—GEORGE C. HARLAN (Philadelphia) finds that separation of the iris from its ciliary attachment, as the result of a blow upon the eye, is comparatively frequent, rupture of its pupillary border much more rare; rupture in the continuity of the membrane is rarest still, and he has not found record of a case of the radiating form of the latter. He reports six instances of pupillary rupture and two of radiating rupture in the continuity of the iris.

In the cases of rupture in continuity the edges of the small radial slits parallel to the iris-fibres tend to approximate, which makes them much more difficult to detect. They can be seen only by transmitted light; oblique illumination does not discover them.

As would be expected from the nature of the accident, when the iris is ruptured by contusion the eye usually suffers some other injury, such as more or less extensive intraocular hemorrhage, injury or dislocation of the lens, or, most frequently, rupture of the choroid.

In the five cases remaining under observation from four weeks to three years after the injury the mydriasis was permanent.

In two cases the accommodation was the same as in the sound eye, and in two it was only partially suspended. In the others it was not practicable to estimate it.

It is probable that ruptures of the iris from contusion, particularly small multiple ruptures of the sphincter, are much more common than is usually supposed. No doubt they have been the cause of the mydriasis in many cases that have been looked upon as paralytic. Harlan believes, however, that the paralytic form does occur as a result of contusion—a kind of peripheral stunning of the nerve-fibres which affects the accommodation equally with the pupil. These cases, however, yield quickly to the action of eserine, and would probably end in recovery in a little longer time without medication.—*Trans. Amer. Ophthalmol. Society*, 1896, p. 640.

Migrating Foreign Bodies within the Eye.—DE WEEKER (Paris) reports two instances of the migration of foreign bodies from the deeper parts of the

epidemic has subsided the surgeon is still treating the disease. Where prompt and suitable treatment is adopted the majority of cases of trachoma are readily and quickly mastered.

For the condition in which the granules are small, discrete, and easily recognizable he prefers to use the actual cautery. The granules having been exposed by eversion of the lids, each granule in turn is burnt out with the actual cautery. The instrument commonly used is a slender, pointed, steel cautery, readily made or obtained from an instrument-maker. Two, at least, should be available, one being heated by an assistant while the other is in actual use. In operating upon adults cocaine is the best anæsthetic, but for children and very nervous patients chloroform must be used. No pain follows the operation, even in children.

In early cases pannus will disappear when the lid is cured, the yellow-oxide ointment being a valuable auxiliary in the treatment. In later cases, however, the condition is much more obstinate and calls for operation. He has obtained excellent results by free peritomy. In performing this operation care must be taken to remove not only the conjunctiva, but all the subconjunctival tissue right down to the sclerotic. This operation, when thoroughly performed, never fails to give benefit, even in the most obstinate cases. The after-reaction is often alarming, but Elliott has never seen any harmful results follow. Should some amount of pannus still remain after the subsidence of all signs of irritation, the circumcorneal ring of tissue may be carefully destroyed with the actual cautery.—*Indian Medical Gazette*, January, 1897.

The Treatment of Dermoid Tumors of the Orbit.—F. BULLER (Montreal) states that in the books extirpation is the prevailing idea, and that no other plan of treatment is suggested as suitable for all cases.

Total extirpation of small, superficially situated cysts is easy of execution and safe enough, but the larger growths that extend for an unknown depth within and even beyond the proper limits of the orbit may have extensive adherence to the walls of the orbit, to the ocular muscles, and even to the eyeball itself, complications which may entirely prohibit extirpation.

He has introduced a crystal of nitrate of silver as far back as possible into the sac, which was lightly plugged with sterilized gauze and the whole covered with a large pad of gauze soaked in a solution of perchloride of mercury.

Nitrate of silver was used instead of any other irritant because it is a potent antiseptic, self-limiting in its action, and sufficiently powerful to insure complete destruction of the epithelial lining of the cyst, and thus leave the whole surface in a suitable condition for complete adhesion and obliteration of the cavity. He has followed this plan of treatment in a number of cases, and always with perfect success.

Myles Standish (Boston) said, in these cases, he had used iodine on cotton to swab out the sac, poked it with cotton, and removed it on the following day without anything further.—*Trans. Amer. Ophthalmol. Soc.*, 1896, p. 687.

Blindness from Sphenoidal Diseases.—C. R. HOLMES (Cincinnati) points out that the septum of bone separating the sphenoidal sinus from the optic foramen is often extremely thin and sometimes incomplete, and that by extension of existing sphenoidal disease through this thinned wall many

cases of obscure retrobulbar neuritis develop, which may end in blindness. Through this same wall inflammation can extend to the nerves and vessels passing through the sphenoidal fissure, causing neuralgia of the ophthalmic branch of the fifth nerve.

He reports a case in which unrecognized empyema of the left sphenoidal sinus caused intense headache and total loss of sight in the left eye, light-perception being lost. The cavity was opened by a drill, through the anterior nares, and all pain of the eye and head entirely disappeared twelve hours after the operation. Light-perception returned and ultimately ability to read large type and tell time by a watch. On two occasions, the openings becoming obstructed, headache and impairment of vision occurred, which promptly disappeared when drainage was re-established.—*Archives of Ophthalmology*, vol. xxv. p. 460.

The Bandage in Cases of Heterophoria and Squint.—F. W. MARLOW (Syracuse) points out that the onset of convergent strabismus during the wearing of a bandage for injury or disease in childhood, or during any affection which temporarily prevents binocular vision, is not uncommonly observed. A considerable increase in the degree of heterophoria, and more especially an increased interval between the induced double images, are often observed when a bandage has been worn for two or three days after a tenotomy, which, at the time of operation, apparently corrected nearly the whole manifest error. Therefore the annulling of the binocular function by the total exclusion of one eye from vision for a few days would be likely to render manifest any latent heterophoria.

He is also inclined to attribute great importance to the immediate influence of the binocular function in establishing a perfect equilibrium after tenotomy while the tendon is more or less completely detached from the eyeball. This function compels the eye to occupy the position in which single vision is possible, and thereby helps to determine the point at which reattachment of the tendon shall take place. If, on the other hand, the eye is bandaged, it assumes its position of rest; there is no tension or straining of the tendinous fibres induced by the desire for binocular single vision, and the reattachment may take place at a point by no means the most favorable for that purpose.—*Ophthalmic Record*, 1897, p. 117.

OBSTETRICS.

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A Study of the Excretions of Parturient Women.—In the *Archiv für Gynäkologie*, 1896, Band lii. Heft 3, NEUMANN reports the results of his study regarding the excretions of parturient women. He first endeavored to