

INJURIES.

The eye has wonderful reparative powers, and will bear a deal of damage of a certain kind. There is one part of it, however, which is very intolerant of injury, namely, the ciliary region, corresponding to a circum-corneal zone of about 5 mm. in width; and a small, penetrating wound there may set up serious inflammation (cyclitis, irido-choroiditis, etc.), with loss of the eye, and, finally, of its fellow. Cases where the ciliary body is involved, which fully recover, may be considered exceptional. The entangling of the iris in corneal wounds or incisions, causing much traction upon its tissue or irritation of the ciliary nerves, is a source of danger not to be despised. Happily, we are now armed with a valuable remedy, eserine, the instillation of which done early in strong solutions (grs. 2—4 ad. ℥j. aq.), by virtue of its powerful myotic properties draws the iris out of the lips of peripheral wounds, or materially lessens its involvement. In cases of prolapse of the iris, if seen at once, the "hernia" can sometimes be reduced by means of a slender, blunt probe, carefully handled, and if this attempt or the vigorous use of eserine does not avail, it is advisable in many cases to excise the knuckle in the wound, or if a cystoid cicatrix should have formed, to split it open and attempt removal of the part involved, or do an iridectomy. In more or less central corneal wounds, especially with injury to the lens, atropine, not eserine, is indicated. Traumatic cataract has been already referred to, but it should be noted that in cases of violence to the eyeball without apparent damage, the prognosis should be somewhat guarded in view of the possible development of cataract, or of detachment of the retina, which is a not infrequent result. Rupture of the choroid may also occur. (I have seen one instance of the almost unique rupture of the retina without external lesion). Not infrequently a good recovery follows a moderate extravasation of blood from traumatism, either spontaneously or under treatment by rest, ice-water dressings, atropine, local depletion etc.; but a copious intra-ocular hæmorrhage puts the eye in a critical state because inflammatory and other changes are likely to supervene. A foreign body on the

iris should be removed without delay through a corneal incision, excision of the underlying iris tissue being often necessary, but if it be a metallic particle and capable of responding, the use of a magnet would likely suffice,—a large one being held close to the corneal wound or cut, or else a probe-point attachment passed within the anterior chamber. This expedient might also effect removal from the region of the lens as well as the anterior part of the vitreous. A foreign body in the vitreous chamber can not unfrequently be seen with the ophthalmoscope or its pathway traced; and even when the vitreous has become hazy and the lens more or less opaque, the presence and position of the intruder may sometimes be determined by testing the field of vision with a lighted taper; a blank or blind spot gives a fairly reliable indication. And again, the holding of a large magnet close to an eye containing a metallic substance capable of responding, will cause pain (by motion) in the globe if encapsulation by lymph etc., have not occurred. The lighting up of severe inflammation after a quiescent period or interval of some days following recovery from the immediate effects of injury, points strongly to the presence of a foreign body; and if a fair trial of the usual antiphlogistic treatment by rest, atropine, cold water dressings, local depletion etc., should fail, and the case go on from bad to worse, the enucleation of the eye is pretty clearly indicated. Some lesions condemn an eye at once to extirpation, e.g., extensive rupture involving the ciliary region even without the presence of a foreign body, and, sooner or later, this is generally its fate; also when a foreign body, even a tiny one, is lodged in the vitreous chamber; for successful removal or tolerance with preservation of a useful organ is the exception. The use of magnets for the extraction of metallic substances will increase the number of recoveries.

SYMPATHETIC OPHTHALMIA.

The subject of injuries naturally leads to that of sympathetic ophthalmia, though it should not be forgotten that the latter is not always due to traumatism. Although its exact etiology is not fully known, sympathetic ophthalmia is a dread reality, and its chapter is a painfully interesting one. There are two