

Notes & Procedures

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Ophthalmic Nursing Series (VII)

Injuries of the Conjunctiva (Contd.)

Foreign Body. Foreign bodies such as grit may lodge under the upper or lower lid. This may easily be removed from the lower lid but in the case of the upper lid it is necessary to evert the upper lid before it can be removed.

Treatment. The foreign body may be removed with moist swab twisted to a point ; or washed out with warm normal saline 1 drop of ol ricini is a soothing application to use after removal of foreign body.

Burns. Acid or alkaline chemical agents may cause burns and it is essential to wash out the injurious substance as quickly as possible, using tap water if most quickly available. Later irrigating with antidotes will be beneficial.

- (i) Acid burns are neutralised with irrigations of 2% sodii bicarbonate.
- (ii) Alkaline burns are irrigated with 2% boracic acid or milk.
- (iii) Lime burns are irrigated with 10% neutral-ammonium tartate or a saturated solution of ordinary sugar.

Soothing drops may then be instilled e.g. ol ricini or olive oil. Subsequent nursing care is as for conjunctivitis or corneal ulceration.

Diseases of the Cornea

Keratitis is inflammation of the cornea. There are several varieties, the most important of which are the following:-

Interstitial Keratitis. This is usually due to congenital syphilis and manifests itself during adolescence. Both eyes are usually infected. A haze appears in cornea and gradually spreads over the whole cornea in two or three weeks giving the eyes an appearance of "frosted glass". There is redness due to blood vessels occurring in the cornea and there is watering of the eyes, irritation and photophobia.

After several weeks the condition begins to clear up and after some months may be completely clear.

Treatment. Usually Atropinè Drops 1% are ordered T.I.D. to keep the pupil widely dilated ; and hot bathing with normal saline.

The patient is referred to the V.D. department for investigation and probable treatment of congenital syphilis.

Corneal Ulcer. An ulcer develops on the surface of the cornea while the surrounding cornea becomes hazy. The ulcer is demonstrated by the use of a yellow dye called Fluorescein. One drop of a 1% solution is instilled and the eye washed out to remove excessive pigment. An easy and clean method is to use a small glass rod which is dipped in the dye and the inside of the lower lid is touched with it ; the patient on blinking the eye distributes the dye. Any raw area of the conjunctiva or cornea is thus stained a bright yellow and it is easy to ascertain the extent of the ulceration or injury. An ulcer may follow an injury and it may occur in old

and debilitated people.

Treatment.

(a) Atropine Drops 1% B.I.D. are usually ordered. Atropine not only dilates the pupil but paralyzes the Ciliary muscle thus putting the eye at rest and giving the cornea a chance to recover.

(b) Disinfectant drops e.g. Penicillin 1 in 500, Sulphacetimide 10% or Argylol 10% are usually employed and instilled two or three times a day.

(c) The eye is firmly bandaged using the full length of bandage to ensure that the eye lid is kept closed.

(d) Hot bathing should be given twice daily for 10 minute periods. (See II of this Series)

(e) **Carbolising the Ulcer.** Treatment is sometimes initiated by the Eye Specialist carbollising the ulcer. The eye is rendered insensitivated with Cocaine 2% and the ulcer stained with Fluorescein 1% to ascertain the ulcerated area which is then dried with blotting paper to prevent any spread of the Carbolic Acid. The Eye Specialist then drips an orange stick into the Carbolic Acid, wipes any excess off the stick with blotting paper and the carbollised stick is then stroked over the ulcer surface; the area is again dried with blotting paper and a drop of olricini instilled after which a pad and bandage is applied.

Note. It is most important that Carbolic Acid is locked away from ordinary eye drops. Blindness will surely result if a drop of pure Carbolic Acid were inadvertently instilled in the eye. *All eye drops must be checked by a registered nurse before any treatment.*

Tarsorrhaphy. An intractable ulcer that is likely to perforate and is sometimes treated by sewing the lids together. In this case the eye is cocaineised and Novacaine 1% solution is injected into margins of the upper and lower lids. The lid margins are lightly scraped removing a shaving of the conjunctiva and the edges of the lids sutured together; usually only the middle third is joined. This keeps the eyelids closed but enables the cornea to be inspected and drops instilled. The eye may thus be kept closed for several months and when the diseased appears to be cured, the eye is again cocaineised. Novacaine injected into the lids, and a pair of scissors used to free the skin joining the lids. The lids are then bathed and a dressing applied if necessary.

Hypopyon. This is a collection of pus, usually sterile, at the lower part of the anterior chamber and is often associated with severe corneal ulcer.

Hyphamea is a collection of blood in the lower part of the anterior chamber. It is seen after a contusion to the eye which may have ruptured the iris. It is also met with as a post-operative complication in cataract etc.

Corneal Foreign Bodies. Particles of sharp grit or other material often become embedded in the cornea.

Treatment. The Surgeon will remove such foreign bodies after rendering the eye insensitivated with Cocain 2%.

Note. All conditions of the eye will be better understood if studied along with the first article of this Series; see January issue, page 17. Further, drugs mentioned in the various articles may be checked by referring to Series II in the February issue, page 49.

There is plenty of work for pioneers—and as pioneers our first concern must always be with the soil.

Our soil is the community in which we live.