

It is evident that a very large number of nurses in India have no intention of answering the call of their country. The slow recruitment to the I. M. N. S. (T) and to the Male Nurses' Cadre is proof of this. We require many hundreds of well educated and experienced nurses to staff the military hospitals and to meet the demands of war-time ancillary services, *i.e.*, hospital ships, ambulance trains, etc.

If in the post-war period a percentage of A. N. S. members are retained in the Service, as "assistant nurses", the trained nurses of today will be largely responsible for this position!

Regarding advertisement—as this advertisement appeared in every Vernacular and English paper throughout India, it was not considered a wise policy to ban it from the Nursing Journal. Incidentally the financial position of the Association is not in such affluent circumstances that it can afford to refuse sources of income.

I think this disposes of the points raised in your letter, and if you feel that this information should be given publicity, I will send a copy of this letter to the Journal.

Yours sincerely,

E. HUTCHINGS,

Chief Lady Superintendent A. N. S.

Office of the Director General, Indian Medical Service,
New Delhi.

Pre-Operative and Post-Operative Nursing Treatment of the Eye.

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The operative treatment of the eye has always commanded great attention and its scope has been largely extended. A better knowledge of Pathology, the invention of new methods of operating and higher skill in the manufacture and adaptation of instruments have conspired to make the operative surgery of the eye one of the most brilliant chapters in medicine. Nowhere else in the body is it so necessary to unite careful discrimination with capacity for general and broad observation as in diseases of the eye. In operation and treatment, it requires needed emphasis.

This article deals only with major operations. In well-equipped hospitals eye operations are done in two theatres—one is an aseptic theatre and the other a septic theatre. Strict asepsis is maintained in both theatres, but in the aseptic theatre, clean operations on the eye-ball are generally undertaken, such as cataract extraction, iridectomy trephining, sclerotomy, excision of the eye-ball, corneal grafting, etc., in the septic theatre, otherwise known as the out-patient theatre, the various lid operations, sac excision, cauterization, ectropion, suturing of the conjunctiva, etc., are undertaken.

The nurse should know how to keep these theatres clean, aseptic methods, sterilization of instruments, preparation of the patient, the various anaesthetics, local, general and nerve blocking, after-treatment of the patients, testing of instruments for sharpness, how to keep these instruments safe after operation, etc. Let us see them one by one.

I. Operation Theatre—The operation table should be in the middle of the theatre with good illumination above. By the side of the table, on one side an irrigating apparatus, preferably a glass jar with a rubber tube and canula, should be provided. On the other side of the table, the various eye-drops and sterilized dressings should be provided on a glass moving trolley. All these should be previously sterilized. The operation room should be thoroughly disinfected a day before the operation and dried. The irrigating apparatus should be well boiled before use. The lotion generally used is either normal saline or boric lotion for irrigating the anterior chamber. This should be boiled separately, cooled to body temperature, and then poured into the irrigating apparatus. After pouring, the jar should be covered by a sterilized gauze lest dust and foreign bodies should enter it.

Atropine, dionine, eserine and cocaine drops are boiled separately and poured into bottles which were previously sterilized and kept ready.

II. Preparation of the patient for operation.—Generally patients for eye-operations will have been attending as out-patients for a long time, and then be admitted a day before the operation. There are so many contra-indications to be observed. General examination should be conducted—including urine and blood, etc. The patient may not be taken for an operation when the constitutional conditions are unfavourable, *i.e.*, in presence of rheumatism, syphilis, severe constipation, bad cough, or an incurable disease like diabetes; and the most favourable time must be selected. For similar reasons, conditions especially promotive of germ growth, like trachoma, pterygium, chronic dacryocystitis, chronic catarrh, must be cured before operating. If there is discharge from the sac, excision of the sac is done. In urgent cases, such as in acute glaucoma, where there is no time to wait, cauterization of both the puncti has to be done first and later on excision of the sac.

In all cases, bacteriological examination of the discharge is continuously made for three days before the operation. A loop of secretion from the conjunctiva of the medial canthus is taken on a glass plate, stained and examined under a microscope for any streptococci or pneumococci. Presence of these cocci in the conjunctival sac is a contra-indication for operation. In such cases, the conjunctiva should be thoroughly washed every day with a lotion of perchloride of mercury 1 in 110,000 for a week before operation.

The degree of fulness of the globe, or what is called the intra-ocular tension, must be carefully studied. The tip of the fore-finger is gently laid on the ball of the shut eye until the full degree of resistance is felt. The pressure must be light and made only with the digital muscles and it must be noted whether it is normal, sub-normal, or increased.

In cases of cataract, the eye is examined for the degree of perception and projection of light. A rough mode of testing is by throwing upon it the light from a torch. The patient is asked to state whether he can see the light, if so from what direction. In this test it is necessary to see whether the pupil is active or not. If there is no perception and if the pupil is inactive, the chances of successful operation are very rare.

After all these examinations, the nurse must proceed with the general cleanliness of the patient. The patient should have a shave and a thorough bath a day before the operation. A purgative, say castor oil or mag. sulph., should be given on the previous day. The eye-lashes should be cut. The skin of the eye-lids, including the edges of the lids, should be washed thoroughly with hot water and soap first, and then with 1 in. 10,000 perchloride of mercury or other lotion ordered by the surgeon. On the day before the commencement of the operation, the conjunctival sac and the lids are thoroughly irrigated with sterile boric or saline lotion. Protection from contagion may be secured by mechanical means, such as bandages, but special regard is to be paid to asepsis. There are always bacteria and some cocci contained in the conjunctival secretion. They abound in the nasal cavity and with flagrant intensity in 'ozæna' and may be transmitted to the eye from the nasal discharges. One must inspect the whole body and know a patient's habits and surroundings to find and remove all sorts of sources of infection. Complete and strict cleanliness of person, clothing and surroundings is the first requirement in asepsis. In applications to the eye, we are obliged to exclude some recognized agents or greatly dilute them because the organ is too sensitive to bear them in effective strength. We, therefore, rely more on asepsis, of which cleanliness is the chief condition, than on antiseptics, when surgical operations are to be done and all sources of infection must be excluded.

The patient should be carefully instructed as to how to behave in the operating theatre and how to co-operate with the surgeon. He must be given every encouragement and must be instructed not to sneeze or talk during the operation. A good night's sleep should be secured with hopeful words and assurances.

III. Anaesthesia:—This is either general or local. Chloroform is used in operations on children and neurotic patients. The disadvantage of chloroform is that it causes troublesome after-vomiting, which may result in prolapse of the iris, the vitreous humour, or even to intraocular hæmorrhage.

Cocaine and novacaine are generally the local anaesthetics. Cocaine 4% is instilled into the eye 5 to 6 times before the operation at intervals of 5 minutes, and the lids should be closed in the intervals. For some operations as sac, enucleation, etc., novacaine 1% is injected.

The modern method is nerve block. Just five minutes before the operation, novacaine is injected into the 7th nerve. One of the objects is to paralyse the orbicularis palpebrarum.

IV. Sterilization of Instruments etc.—Instruments and dressings must be disinfected with the most scrupulous care. Specks of rust or stains should not be tolerated, any more than a dull edge. All blunt instruments must be well boiled in 1% soda. They should be cleaned perfectly before boiling. Sharp instruments should not be boiled lest they may lose their sharpness. Generally these are kept in carbolic acid 3 minutes, carefully rinsed in sterile water, well wiped and kept ready. Small pieces of cotton, gauze and lint are cut and sterilized. Bandages should also be sterilized.

V. After treatment:—After the operation is over, pieces of lint are placed on both eyes which are bandaged. Enough moderate and even pressure must be used to keep the eyes steady and not to cause pain. A light touch, steady hand, and sensitive appreciation of weight and resistance, are the essential qualities. In big eye hospitals, the patients are made to walk from the table to the cot. The patient goes to bed and is enjoined to keep quiet. It is better to lie on the back, but a position on the side may be allowed to relieve weariness. It is important to have a good sleep the first night. The room need not be greatly darkened. Much vigilance is often required in managing patients lest they commit imprudences—such as disturbing bandages and dressings and trying to find out what they can see. It is not rare for a patient to injure his eye with his own finger, especially if the dressings chafe the skin. The bandage will be kept over both the eyes for about a week, and sometimes longer, to be succeeded by a shade. (He can sleep on the opposite side, *i.e.*, on the side opposite to the eye which has been operated on, after the third day. He should not get up unless with the assistance of the nurse.) Fluid diet is advised generally, and in some hospitals milk and bread during the first two days. After the third day, ordinary diet can be given. Every day the eye is opened for dressings, a careful examination is made, and both eyes are bandaged again. For some operations, like the detachment of retina, the bandage is opened only on the 4th day. Generally on the 7th day, when the redness disappears, the bandage is removed. In some cases where there are complications, bandaging has to be continued. After the removal of the bandage, the patient should be directed to wear goggles or an eye-shade for some time to prevent glare.

Bowels should be attended to regularly. Some surgeons prefer enemas and others laxatives. Mouths should be washed out with Permanganate of Potash three times a day, as most of the patients cannot scrub their teeth or clean their mouths properly. The bandage should be watched for any blood stain or hæmorrhage. If the patient develops a cough, it must be attended to immediately.

When the patient is being discharged from the hospital, definite instructions should be given as regards his future work and actions. He should not do near work or expose himself to dust, scorching heat of the sun, winds, or to smoke, for about one month. This piece of instruction is specially important from the Indian standpoint, because we get the majority of these cataract cases and other eye operations from the labouring classes.

Glossary.

Puncti Lacrimal.—Orifices of the lacrimal canals upon the eyelids near the inner canthus.

Pterygium.—A chronic thickening of the conjunctiva, usually triangular and situated at the inner canthus or angle formed at the junction of the eyelids.

Dacryocystitis.—Inflammation of the tear sac.

Orbicularis Palpebrarum.—Muscle of the eyelid.

Ozena.—A fetid nasal ulceration and discharge.