

flasks are used, it must be remembered that the constant boiling renders the solution more concentrated, but also, to some extent, destroys the alkaloid, so that the same solution must not be used indefinitely.



*Chalk's Drop Bottle.*

The use of drops has the disadvantage that a spasmodic closure of the lids immediately after the drug has been applied will often drive the greater part out of the conjunctival sac, either on to the face or down the nasal duct. To remedy this, the alkaloids are now often used in the form of ointment. The basis given by the British Pharmacopœia is too hard to be convenient. Vaseline is far the best vehicle, in my opinion, for the purpose. Such ointments are readily put into the conjunctival sac by means of a smooth probe or a camel's-hair brush. The lower lid should be drawn away from the globe and the loaded brush or probe placed within the cul-de-sac; on releasing the lid and withdrawing the instrument, the ointment is wiped off on to the conjunctiva and gradually diffuses over the eye.

If a brush be used it must, of course, be kept for the use of one patient and for one ointment only. A probe can easily be cleaned and then sterilised by heat.

The nurse must be careful in using atropine drops or ointment lest she get even a minute quantity into her own eye. Several times I have seen nurses partially incapacitated owing to their having rubbed their own eyes after putting atropine into the eyes of a patient, and thus having accidentally paralysed their own accommodation.

Strong astringents, copper sulphate, nitrate of silver, or zinc chloride also are often employed as drops. The silver salt, if used for a long time, has the objectionable property of staining the conjunctiva and sclerotic a dirty brown from the deposition of silver in the tissues. To limit its action to the lids, where alone its presence is usually required, they should always be everted and the excess of silver neutralised by the addition of salt solution; this forms an insoluble body, silver chloride. The stain, once formed, is permanent.

Recently many silver compounds have been invented, in which the silver is combined with an organic base. The best of these seems to me to be protargol. It can be used in strong solution, up to 33 per cent., and has much less liability to stain the tissues. These silver salts have a powerful bactericidal action against some forms of micro-organisms, and are therefore constantly employed in ophthalmic surgery as antiseptic astringents. They are best painted on the everted lids by a small mop of wool wrapped round a glass rod.

A few drugs, mostly caustics, e.g., copper sulphate, and silver nitrate, are sometimes applied in solid form.

It is necessary to take special care when the cornea has lost its protecting epithelium, in the selection of drugs. If a lead lotion be applied to an eye which has a corneal ulcer, the lead is often deposited in the form of carbonate on the raw surface. Large rough plates may remain adherent to the tissues, giving rise to constant irritation. In one instance, also, I have seen an opacity of the cornea which resulted from the neutralisation of silver nitrate by sodium chloride. The insoluble silver chloride was deposited all over the raw surface of the cornea and remained permanently opaque.

Apart from drugs, the local remedies applicable to the eye include heat and cold. Heat may be applied either with or without moisture. A poultice was formerly the chief standby, when heat, and especially moist heat, was required. Now this form of dressing is almost entirely given up in surgical wards (the warm organic matter is a favourable incubator for bacteria), and its place taken by hot fomentations, the liquid employed being an antiseptic, and the material being often impregnated with antiseptics also.

If moist heat in the form of hot fomentations be ordered, the nurse must not be content to make a single application and leave it for some hours; a very few minutes suffices to rob a hot dressing of most of its heat, and therefore its value. Two pieces of lint, each folded into a square of four inches, should be used; one dipped into the hot antiseptic solution and wrung almost dry in a towel should be laid over a thin pad or directly on the eye, covered by a rather larger piece of oiled silk or jaconette. It will cool in about ten minutes. Before it is removed the second pad should be served in the same way, so that it may replace the first without an interval. If a dressing be on the eye it should be reduced to a thin pad secured by a single turn of bandage, a long end, sufficient to make another turn, being left; this will hold the hot lint in position.

Dry heat is often most useful, especially when

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