AFTER-TREATMENT OF SMALL FLAP SCLEROTOMY

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THERE has always been something elusive in small flap sclerotomy. There has been no sufficient explanation of the very variable results obtained, both as regards the individual cases of any one surgeon, and in comparing the averages of different surgeons. And one has often felt the need of some means of increasing the effect of an ill-cut flap.

Apparently a reasonably ample explanation has been found, and much of the necessary aid supplied, in Cruise's after-treatment by the application of finger pressure to the eye *from the beginning*, to "force up the little trap-door to prevent immediate healing." See *Trans. Ophthal. Soc., U.K.*, Vol. XXXVIII (1918), p. 247, and Vol. XLI (1921), p. 249.

The same principle of very early interference with healing, applied differently, seems possibly to account for the comparative success obtained throughout by Laws in Nottingham. But it has not been applied sufficiently and of set purpose. It has been the practice there to get the patient out of bed on the day after operation, going about the wards, and to discharge him from hospital or nursing home often within a week. Thus there have been almost from the beginning more or less frequent blinking movements, probably in some cases nearly as effectual as the more powerful, but infrequent use of the surgeon's or nurse's finger.

At first I was not much impressed by Cruise's statements, because I had frequently used massage with very little effect, beginning too late. The application of gentle sustained finger pressure through the lower lid may be begun on the afternoon or evening of the operation day, and repeated two or three times daily, partly emptying the anterior chamber. Excessive use of this pressure may be expected possibly to increase the number of partly fistulous cicatrices, but such scars from this operation do not seem to lead to late infection.

Pressure may prove ineffectual and inadvisable in case of very shallow chamber with detachment of the choroid, but this condition is seldom seen after this operation.

After the first few hours the patient should be encouraged to keep his eyes open, and to blink frequently. A pad may be required for the first night or two over the operated eye, but omitted during the day, a shield only being worn.

It is a little difficult now, after so many years, to appreciate the value of this very simple and obvious after-treatment. It makes

all the difference between failure and success in some eyes. As Cruise has found, it ensures the success of the operation in the considerable majority of the primary glaucomas needing operative treatment in this country. I recently suggested restricting the small flap operation to cases in which the plus tension could still be reduced by eserine, in order to eliminate failures. This restriction has already been proved both unnecessary and, as in the instance here given, unavailing.

I operated on the right eye of a patient over two years ago. The tension was readily reducible to normal, but loss of visual field had taken place quite up to the fixation point without the slightest warning to the patient. The left eye was then normal, but shortly afterwards a scotoma was found with a moderate rise of tension. Owing to the insidious nature of the case, as seen in the other eye, operation was performed; and it had to be repeated eleven months later. Recently the tension of both eyes was found slightly raised again, with a little further loss of visual fields. Both eyes have been operated upon together, and the correct after-treatment applied, as above. The difference in the immediate result from that of the former operations has been very noticeable.

The case was at first quite a puzzle to me; I did not realise that the earlier operations failed simply through the excessive anxiety of the patient and his relatives to avoid the slightest injury to the eyes. The patient was extraordinarily careful always to keep still with the eyes closed after the operations.

I suggest that some of the surgeons in this country who are still pleased with trephining are too easily satisfied. One sees some shockingly dangerous-looking results, in which the elevated remains of conjunctiva over the dark scleral opening become progressively thinner. However familiar such conditions may have been in the past, one cannot now rest content with any method which unnecessarily risks their formation.

There has recently been a limited return to the small flap operation. With the help of this after-treatment the movement may be stimulated into a widespread revival. I do not suggest that this is the last word in the glaucoma problem. But it may mean the partial practical settlement of the question for a number of years, till possibly the technical detail is found which is needed to make "ideal" sclerotomy* acceptable. There will always, however, be some severe advanced glaucomas in which any sclero-corneal wound free from iris-inclusion will heal more or less firmly. These demand other treatment.

**Proc. Roy. Soc. Med.* (Sec. Ophth.), 1914, p. 127, and *Trans. Ophth. Soc., U.K.*, 1919, p. 226.