applicability is one great feature. The gentle, moderate, and diffused power of a fluid is substituted for leverage instruments and pressure outside the eye. It rejuvenates old methods discarded, unsettles old notions about ripeness of cataracts, and brings us nearer the goal of the surgeon—to give speedy and effectual relief to sufferers hitherto doomed by imperfect methods to long years of delay and misfortune.

I do not wish to say that any one of all the instruments devised for intra-ocular injection is perfect. I wish to emphasise the method as that of the removal of cortex by the force of a fluid. The operation for cataract is a purely mechanical procedure, and I hope that year by year we shall more and more perfect our appliances, and that all the instruments we have hitherto devised may be replaced by others more effectual, and that by our labours we shall increase the sum of human happiness.

ON THE AFTER-TREATMENT OF CATARACT AND OTHER OPERATIVE CASES TO THE EXCLUSION OF DARK ROOMS, BANDAGES, Etc.

By SIMEON SNELL, M.R.C.S.,

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WHEN a new method of treatment has been advocated, especially when at variance with the plans usually adopted, it appears to me to be only fitting that he who is responsible for such advocacy should, at a subsequent date, state whether or not further experience has confirmed his views. These are the reasons for my reading this brief communication. For it may be recollected, by some at all events, that in an article in the *Lancet* nearly twelve months ago (September 18th, 1886), I spoke in high terms of a mode of treating cataract and other cases after operation without the stereotyped bandages, dark rooms, etc. Instances of operation cases in support were recorded, and I said I was disposed to adopt Chisholm's words, "From this time hence all bandages, compresses, and dark rooms will be among the things of the past, to be remembered only for the discomfort they occasioned."

My subsequent experience confirms all I stated in my first article. The plaster method has now been used in my hands in forty-eight cataract extractions in hospital and private practice. and in over one hundred other operations, including several for traumatic cataract, needlings for congenital cataract, opaque capsule, iridectomies, sclerotomies, and others. The stay in hospital of the cataract cases has been shortened, and the comfort to the patients has been great. Those who had previously undergone treatment under the old *régime* readily appreciated the altered conditions of the new plan. The mode of cutting and applying the plaster recommended by me I have found very convenient.

The engraving gives the metal shield for cutting the plaster in the desired shape. By reversing it the same does for each eye, and is marked R and L on the respective sides.

I have reason to believe that others in different parts, since the appearance of my paper, have adopted the plaster treatment.

Chisholm (*American Journal of Ophthalmology*, June, 1887), who

¹ Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association held in Dublin, August, 1887.

with Michel, was in America the advocate of this revolution in the after-treatment, has advanced beyond the position to which I alluded last year. Now he finds closing one eye sufficient, and no longer requires the patient to take to his bed; he lies on a lounge, and retires at ordinary bed time, and dresses before breakfast in the morning. "His present practice is to treat the wound made in the extraction of cataract as if it were an ordinary corneal wound, such as we daily see resulting from accident." At the end of the first week the patient can be allowed the privilege of the entire house.

From the first in cases of operation for traumatic cataract, and in some iridectomies and sclerotomies, I have not always seen the necessity of fastening up both eyes, and bed has, after the day of operation, been dispensed with. As far as cataract extractions are concerned, there have appeared to me to be advantages in securing both eyes, and I should rather hesitate to regard them merely as ordinary corneal wounds.

ON THE OPERATIVE TREATMENT OF ZONULAR CATARACT.¹

By DAVID LITTLE, M.D.,

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IN bringing the subject of zonular cataract before you, it is my intention to make a few remarks on the operative treatment, and I shall confine my observations chiefly to those cases of ordinary uncomplicated zonular cataract in which there is no arrest in the development of the eye, no shrinking of the lens, and no vitreous opacity or deeper seated disease.

I may say at the outset that I have nothing new to offer in the way of operation, beyond advocating a method which I have found from experience to be the best for gaining good vision. It is this, that when destruction of the lens is decided upon, I recommend a free crucial rupture of the capsule with a needle, so as to make the whole lens opaque and more soft, and two or three days afterwards to perform extraction by means of a Teale's suction instrument.

The disturbance of vision caused by zonular cataract depends altogether upon the extent and density of the opaque layer. If, on dilating the pupil, the zone is broad and perfectly transparent, vision may be fairly good; on the other hand, if the central opacity is great, considerable reduction of sight must exist.

My experience in the examination of the refraction in these cases is that some are emmetropic, a few only are hypermetropic, but the great majority are myopic. I never fail to test the vision before and after atropine, at the same using lenses to correct any defect in the refraction.

In the case of very young subjects whose vision cannot be accurately ascertained I postpone all interference for a time, unless it is quite manifest from the extent of the opacity that sight is bad. It is upon such an examination as this that I base my opinion for operative interference or otherwise.

I recommend destruction of the lens in all cases that are found to be of a progressive character, also in non-progressive cases where vision equal to at least twenty-fiftieths is not obtainable, after dilating the pupil with atropine. I would go further than this in exceptional cases, and say, if I found that twenty-fiftieths was not sufficient sight for the requirements of the patient, and if he or she were between the ages of 10 and 25 (which I consider the most favourable age for operation), with perhaps some myopia, and all other conditions favourable, I would not hesitate to recommend extraction. When the lens, then, has to be dealt with, there is the operation by solution. This is a tedious process, and I hardly ever adopt it in zonular cataract.

I have been most satisfied with the suction operation. Having dilated the pupil, I make a free rupture of the capsule across the pupil extending from margin to margin; a similar rent is made from above downwards, keeping the needle well in the anterior part of the lens. The capsule is extensively ruptured in this way to cause its retraction well behind the iris, and so avoid secondary operations; the needle should not penetrate too deeply for fear of rupturing the hyaloid or dislocating the lens. A light bandage is placed over the eye, the patient is kept quiet, and atropine freely used to dilate the pupil. After two or three days, or more, according to the condition of the eye, extraction is performed by a Teale's suction curette. This is accomplished by making an incision in the outer part of the cornea, halfway between the limbus and centre, with a double cutting edged needle from 3 to 4 millimètres broad. Through this wound the curette

¹ Read in the Section of Ophthalmology at the Annual Meeting of the British Medical Association held in Dublin, August, 1887.