at once noticed improvement in vision. During the evening, and also the next day, there were some general injection, slightly increased tension, and also slight vitreous haze; but the tension soon disappeared by the application of eserine twice a day, and the haze gradually diminished, so that at the end of the week he could read, with cataract glasses, 14 Jäger and $\frac{3}{4}$ Snellen. At the end of a fortnight, the disc was almost distinct. Words of 4 Jäger were read with difficulty and $\frac{3}{4}$. From the condition of the iris, perfection of sight in this eye would be simply impossible.

Do not these and other similar cases show the performance of the old operation of couching in the roughest manner, but producing results, as we see in one instance mentioned above, and after a period of twelve years, so good that it is rarely equalled by the best mode of extraction? Do they not point out that the almost universal condemnation of this old operation of our forefathers requires to be modified; for, disastrous as the results of couching have been, and having succeeded to the hospital practice of a surgeon who chiefly depressed, I speak with some authority, and believe that, in suitable cases, these bad results have been rather due to laceration of the capsule than to the forced dislocation of the lens.

Putting aside a large number of cases for which couching is quite unsuitable, and confessing that I have only had the courage to carry out my opinion in a few cases, still, with all reserve, I feel that, in a limited number of patients with senile cataract, such as those of great age with severe cough, or a marasmic constitution; or where suppuration or hæmorrhage has followed extraction in one eye; or where previous examination of the patient before the lens has become opaque, has shown very fluid vitreous humour, and some others, recourse may be had to this operation, now outside the pale.

Should other surgeons agree with me that art ought to accomplish equally well what accident effects so rudely, and nature spontaneously, I think they will find my plan of operating the most desirable, as it will decide in such cases whether depression is advisable; for should the vitreous humour be fluid, on detaching the suspensory ligament, except at its lower part, the lens will fall away from the pupil, when this movement may be continued by the aid of the instrument downwards and backwards to the fundus, where it will remain partially fixed by the remains of the ligament; but, should the lens retain its position, the operation of extracting it in its capsule will probably be the better one.

Von Graefe has stated that a lens, perfectly freed from its detachment, is less likely to set up glaucomatous symptoms than one partially detached; but, in the plan proposed, the lens is practically free, although still adherent at one part.

ON THE USE OF ESERINE AS A PRELIMINARY TO EXTRACTION IN CASES OF CATARACT.*

By CHARLES BELL TAYLOR, M.D., F.R.C.S.,

Surgeon to the Nottingham and Midland Eye Infirmary.

IN selecting an operation for cataract, the surgeon will always have two ends in view; first, to adopt such a method as will secure the smallest percentage of positive failures, and second, one that will give the most brilliant results, both as regards appearance and vision.

Unfortunately, these two ends are not always compatible. What may be done in the way of cataract operation, I shall illustrate by two patients who are subjects of double extraction with central and movable pupils, who are kind enough to attend here to-day; as also by another patient who has had both eyes operated on in the manner I am about to describe.

No one—if you will pardon a slight digression—who has had experience in ophthalmic surgery, can have failed to appreciate the advantage of a background of iris when extracting small chips of steel or other foreign bodies from the surface of the cornea. Unless the eye can be turned in such a direction as to obtain this advantage, there is apt to be a want of precision in our proceedings; and, when the foreign body is situated exactly opposite the black expanse of the pupil, it may be either overlooked altogether, or attempts at extraction may be attended by unnecessary denudation of the cornea. A drop of eserine obviates this inconvenience, and the foreign body, thrown into strong relief, is readily removed without doing violence to any of the tissues not actually involved.

Now, if a background of iris is a convenience when operating for the removal of foreign bodies from the surface of the cornea, it is equally advantageous when operating for extraction of cataract; while a deep anterior chamber, and a pupil so contracted as to reduce the

chances of subsequent prolapse to a minimum, are so manifestly in favour of the operator, that I cannot doubt that the instillation of eserine will speedily become generally adopted as the first step in the operation of extraction for cataract, as also in some cases where it is necessary to form an artificial pupil, or to remove foreign bodies from the cornea. I generally apply the solution half-an-hour or twenty minutes prior to commencing the operation; which, premising that I always secure complete control of the eyeball by forceps that pierce the sclerotic, may be accomplished, according to the varying exigencies of each individual case, by one or other of the following methods.

First, I use an extremely narrow-bladed knife; enter it with the edge directed upwards in the corneo-sclerotic junction on a line with the pupil; bring the knife out exactly opposite, and then cut upwards with a gentle sawing motion until close to the corneo-sclerotic junction of the upper third of the cornea, when the edge of the blade is turned forwards and the section completed. I then excise a few fibres of the upper segment of the sphincter of the iris, lacerate the capsule, and extract in the usual way. It is only in very exceptional cases that I find it necessary to administer anæsthetic; and, in a majority of patients, I am in the habit of manipulating the knife so as to get a portion of iris across the edges, completing the iridectomy and section at the same time.

The only delicate portion of the operation now remaining is the laceration of the capsule, which, when possible, I dispense with, and extract the lens and capsule entire by careful manipulation on the surface of the cornea. The operation may be simplified by a preliminary iridectomy, which I accomplish by a small incision midway between the upper edge of the pupil and the corneo-sclerotic junction, lacerating the capsule at the same time. If this be done half-an-hour before the extraction, the aqueous humour is resecreted, and the only risky part of the operation is completed when the eyeball is thoroughly under control. Or, instead of completing the incision, I leave a bridge in the upper third of the cornea, make an incision in front of this bridge, perform a slight iridectomy and lacerate the capsule, dividing the bridge as the last stage in the operation; or a bridge may be left at the angle of the wound, which is subsequently divided with scissors. If it be desirable to extract without iridectomy, I make an incision with the pupil under eserine, and extract when the contraction caused by eserine has been overcome by atropine, which takes place in about half-an-hour.

The Use of Eserine as a Preliminary to Extraction.—Iridectomy purposely effected with the knife, or half-an-hour before the removal of the lens, or under the protection of a bridge which is subsequently divided, is, so far as I know, a novel feature in the operation of extraction for cataract. In my hands, eserine has proved specially useful; and I have here a patient in whom the iridectomy was effected in the left eye with the knife in the right eye half-an-hour before extraction. The two other cases of double extraction in which the iris is untouched demonstrate the brilliant results which are obtained by preserving a central and movable pupil; and, had it been practicable, I could have introduced several patients illustrating what I conceive to be the advantage of one or other of these modes of procedure in suitably selected cases.

ON BENT TIBIÆ IN CHILDREN: CAUSE AND TREATMENT.*

By CHARLES STEELE, M.D., F.R.C.S.

IN this short paper, I do not intend to dwell upon either the characteristic forward bending of rickets or the severe cases of bent tibiæ associated with deformity of the knees or ankles, but to speak of those milder cases where the inner surface of the shaft of the tibia, instead of being straight from the upper to the lower extremity, presents a curve outwards and backwards; and, in doing so, gives a twist to the ankle, which carries the foot with it, and compels the toes to turn inwards. This unseemly appearance is very objectionable in children belonging to the upper classes; and by it, in some instances, I have detected the cause, and confirmed my diagnosis on examination.

These children, with their feet and legs naked, cannot possibly turn their feet outwards when walking, unless they straddle their knees; but as, under proper treatment, the curved tibiæ approach the normal straight line, the feet naturally turn straight, and can be turned outwards. If not detected and treated early, bandy legs probably result; and the condition can be remedied, whether late or early, by the use of irons, persistently applied for some time. But irons are objected

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