

the groin, filling the iliac fossa, and extending to the middle of the thigh; feeble pulsation, tumor appearing a few days after the accident; pain severe; diagnosis aneurism; treatment ligature of the common iliac artery; death on the fifth day. At the autopsy the femoral and external iliac arteries were found perforated to the extent of an inch on the postero-external aspect; the head of the femur lay in the cavity of the aneurism.

In view of the occurrence of such results, the importance of clearly ascertaining the relation of the dislocated head to the femoral vessels is manifest; and Stokes's case emphasizes the necessity of ascertaining the position before any attempts at reduction, and not after. I do not find any constant relation in the pubic form, although it has been so formulated by various writers. Sir Astley Cooper¹⁴ stated that in the ordinary pubic dislocation, "the head is situated upon the pubes, above the level of Poupart's ligament on the outer side of the femoral artery and vein." This observation was based on an autopsy in an old case of unreduced pubic dislocation. Of the ten cases of pubic dislocation which he quotes, the position is not noted in six. In one of the remaining four (the autopsy just referred to) the head lay to the outside; in the second, it lay to the inside — "very unusual" — he comments. In the third "the head of the bone had taken a course behind the femoral artery and rested in a space between the psoas and pectineus muscles"; and Mr. B. Cooper remarks that the position is "much more to the inner side than is usual in this dislocation, as the head of the bone is more frequently placed to the outer side of the femoral artery." In the fourth case, the head lay under the artery, stopping the pulsation, as already described. Of these ten cases, then, in one, the position of the head was noted to be on the outside, in one under the artery, and two on the inside, so that from the Coopers' own statistics, the inside position does not appear to be so "very unusual," and this is confirmed by other cases, demonstrated post-mortem, namely: In one, Aubrey¹⁵ found the head lying between the psoas and pectineus, raising the latter muscles, and with it the vessels. In a second¹⁶ the head was thrown upward resting against the outer side of the ilio-pectineal eminence, and had displaced the artery outward, so that it lay curved outwardly, below Poupart's ligament. In a third¹⁷ the vessels were found crossing the head, and in a fourth¹⁸ an old case, in which the neck of the femur had been fractured, the head was found on the inner side of the vessels.

From the cases quoted, then, it appears that (1) in pubic dislocation, a considerable danger may threaten the patient from injury to the femoral vessels; that (2) the relative position of the vessels and dislocated head are of interest with especial reference to efforts at reduction; but (3) their relative position is not constant; and (4) the position of the dislocated head with reference to the normal position of the vessels should give rise to no inference as to the actual position of the vessels, for, the head lying outside the normal situation of the vessels, may still have the vessels outside it.

¹⁴ Sir A. Cooper: *Loc. cit.*, p. 111.

¹⁵ Aubrey: *Bull. de la Soc. de Chir.*, 1853, vol. viii, p. 377.

¹⁶ Albert: *Chirurgie*, vol. iv, p. 276.

¹⁷ Roser: *Arch. für Phys. Heilkunde*, 1857, vol. i, p. 58.

¹⁸ Douglas: *London and Edinburgh Monthly Journal of Medical Science*, 1843, vol. iii, p. 1064.

It may be inferred that the careful location of the vessels should be the indispensable preliminary to any attempt at reduction, and that the primary manipulation should be directed towards freeing the vessels and head from a dangerous relationship.

REPORT OF FIFTY CATARACT EXTRACTIONS BY A NEW METHOD.

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BROADLY speaking, the operation for the removal of the cataractous lens may be divided into two distinct methods; with and without an iridectomy, modified to a certain extent by the will and pleasure of the operator. In my limited experience as an operator and observer, neither method has resulted altogether satisfactorily; but in many cases, far from it.

Those advocating an iridectomy claim that the mutilated iris and resulting coloboma forms no particular objection, as the lid covers it, and that the lens and cortical can more easily be removed, and that there is less tendency to iritis and loss of vitreous. On the other hand, promoters of simple extraction maintain that an operation allowing spherical aberration, and at times a large and distressing amount of light to enter the eye, is far from ideal.

There can be no doubt in the minds of those who have operated by both methods, that so far as the removal of the lens and cortical are concerned, it is just as satisfactory under one method as the other, if the operator takes the precaution of following the expressed lens by the cortical before the iris becomes replaced. There is also less danger from loss of vitreous in simple extraction, that is, so far as I have observed, the reason being obvious.

It is not, however, the loss of vitreous, difficulty with the lens, etc., which has induced some of our best operators to abandon the operation of simple extraction, but the far more important and decidedly unsatisfactory accidental complication of prolapsed or incarcerated iris.

To have a patient, more especially a private one, complain of irritation and gritty feeling in the eye, and on examination to find a prolapsed iris is, to use a mild expression, very annoying, not that the prolapsed iris and necessary excision results in any particular danger to the ultimate success as regards sight, but our simple extraction has proved a failure, and the moral effect on the patient of a second operation is bad, leaving out of consideration the disturbance of a partially united wound and a second chance of septic infection.

If we are fortunate in escaping a prolapsed iris, there is a chance of incarceration which, although not as unsatisfactory as prolapse to the operator, may eventually prove more so to the patient.

Very little has been written about this mishap. Even a small incarceration which shortly after an operation seems of trivial importance may be the source of irritation to an eye in after months. I have seen patients whose anterior synechiae were looked on as no particular misfortune, return with a misplaced pupil, and a tale of woe as regards irritation, and in some cases of considerable ciliary neuralgia.

The operation I now propose for your consideration, is one which I have attempted in fifty, and performed

in forty-seven cases without any selection of cases. Three of these, on account of numerous posterior synechiæ necessitated an iridectomy. Although the number of cases is not large, I think it is sufficient to justify my claim, that simple extraction can be performed without any danger of subsequent prolapse, or incarceration of iris, leaving a round, central and movable pupil.

The operation is performed in the following manner: After making a corneal cut, exactly at the corneal-scleral junction, a very small piece of iris about one or two millimetres from the periphery is caught up, either by means of a fine iris forceps with teeth situated on the lower portion of the blade as near the point as possible, or by means of a sharp hook, the bent portion being at right angles and about one millimetre long, and gently drawn out, is cut horizontally as close to the gripping instrument as possible; this leaves a small round opening not more than one to two millimetres in diameter. The lens and cortical are now pressed out in the usual manner, particular care being taken that the cortical shall follow the lens before replacement of the iris takes place.

After removal of the pressure the iris usually replaces itself, if there is any difficulty, a David's spoon or any other suitable instrument can be used for its replacement. A one per cent. solution of atropia sulphas is instilled and applied at each subsequent dressing. This small opening I have found amply sufficient to prevent prolapse or incarceration, and is invisible, except under careful examination.

The reason for making a small opening is to allow the free escape of the aqueous which collects behind the iris, otherwise when a sufficient quantity has been secreted, any movement of the eyeball inducing a gaping of the wound, is followed by a rush of aqueous and a washing out of the iris in some cases; for where the iris has some tone and the circular fibres strength to resist, it will not happen. The irides becoming prolapsed, or incarcerated are to be regarded as in a flaccid or limp condition.

The phenomenon may be practically demonstrated by performing simple extraction, allowing the anterior chamber to be partially refilled, and applying gentle pressure.

If, after reducing the iris a second time a small opening be made, no change in the condition of the iris will take place.

I remember a case some time ago in which a piece of steel had become imbedded in the tissue of the iris, and it was impossible to remove it without bringing the iris with it. I found I could not replace the iris, and after several futile attempts I was about to excise the prolapsed portion, when in place of doing so I made a small peripheral incision, after which I had no trouble in returning it, leaving a cosmetically perfect eye.

I have dwelt perhaps at length on the theory of the cause of prolapse. My reasons for this are, that it has been doubted as to whether the aqueous had any direct or indirect cause in its production.

The result obtained from this operation during convalescence has been much more satisfactory than those obtained from modified Graefe.

I have been pleasantly surprised at the slight amount of irritation and injection found on removal of the compress.

Slight secondary iritis has been the exception rather

than the rule, while the reverse has been my experience with the modified Graefe.

No tabulated statement has been deemed necessary in this article, as all were senile cataracts, the ages of the patients ranging from forty-five to eighty-four. Nothing abnormal took place either at the time of operation or during convalescence, except in a few of the cases as mentioned below.

Atropine was not instilled in the first fifteen cases until the third or fourth day, and as a consequence, the majority had two or three small filiform posterior synechiæ which, although not interfering with the position or symmetry of the pupil, were readily revealed under a mydriatic.

In the later cases, atropine was used immediately after the operation and at each subsequent dressing, and although a few have had synechiæ, the majority were perfectly free from any adhesion.

In one patient suffering from rheumatic arthritis, iritis supervened on the fifth day, and although the result was satisfactory regarding direct vision, the pupil was small and the field so contracted, it was thought best to do an iridectomy. In another case atropine was omitted through a misunderstanding which resulted in blocked pupil. The patient has not returned for secondary operation.

In another case a small prolapse took place after union of the wound. This exception, however, rather proved the rule. On account of the restlessness of the patient it was doubtful whether an opening had been made, as I was unable to get the patient to look down; subsequent examination during convalescence revealed no opening.

The resulting vision tabulated below was taken in the majority of cases and at the time of discharge, two or three weeks after the operation, no second test having been made for improvement of vision. Subsequent examination would have doubtless given better results.

1 case (blocked pupil)	vision = hand.
1 case (central choroiditis with lateral fixation)	" = $\frac{2}{6}$
3 cases	" = .1
2 cases	" = .2
8 cases	" = .3
9 cases	" = .4
10 cases	" = .5
4 cases	" = .6
4 cases	" = .7
1 case	" = .8
4 cases	" = .9
3 cases Graefe's operation done.	

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Secondary operation was performed in seven cases, and antiseptic precautions taken in all.

This operation, thus far, commends itself to me as liable to fewer accidents than any method at present employed, while furnishing as good results.

— A daily paper in Chicago announces that a practice tending to demoralize an important branch of the city service has been stopped. The Health Commissioner has issued an iron-clad order that henceforth all vaccination by the health inspectors shall be done upon the arms and not upon the legs. This action was found necessary because of the constantly increasing applications of young women who desired to be vaccinated upon the legs to avoid the slight scar on the arm, which would be visible on dress occasions.