Evidence indicates that they affect the invading organism in the sense of producing a bacteriostatic action which, in many cases, is not sufficient to effect sterilization without the co-operation of the defensive mechanism of the host (MacCallan).

It is hoped that the above memorandum may be of interest to those ophthalmologists, who, under present conditions, are unable to peruse foreign literature.

A FIRST HUNDRED CASES OF INTRA-CAPSULAR CATARACT EXTRACTIONS

By

J. B. McARevey

Dublin

This is a report on the results of the first hundred cases on which I attempted to perform cataract extraction by the intra-capsular method. The patients were not selected, they were routine cases, 23 being private and the remainder hospital patients.

Starting off on this method of removing the lens my chief fear was the prospect of having an increased number of vitreous prolapses which must always be considered a major catastrophe, although the immediate results when the lens is gone are less serious.

The minimum age of the 100 cases was 50 years, and the maximum 88 years. Forty-nine were females and 51 males. The number of days in hospital after operation for the 100 cases was 15-3 days. The lens was delivered in its capsule in 67 cases out of the 100; they required 15-6 days in hospital. In 33 patients I was unable to deliver the lens in its capsule. During the expressing of the lens in 21 cases the capsule ruptured, in 4 cases the lens was intumescent and it was not possible to grasp the lens with the forceps. In 8 patients I was not able with reasonable pressure and traction to dislocate the lens, so the intra-capsular method was not persisted with. The number of days in hospital for the 33 extra-capsular extractions was 15-2 days.

The intra-capsular method employed was that of Elschnig in which the lens is “tumbled.” In cases where there is a large nucleus if the lens is grasped low down and pressure with the hook is made in the correct position the lens dislocates, but if faulty pressure is made the lens will pass up behind the limbus; this type of lens should be delivered by traction.

Pre-operative slit-lamp examination is essential. The following points I would stress:—
1. Anaesthesia: Absolute lid anaesthesia, in patients over 60 retrobulbar injection caused such a softening of the eye that I stopped using it after the first few cases.

2. Sutures: A superior rectus suture was used in all cases, after the section was made a conjunctival suture was put in. This is helpful but a scleral suture would appear to me more satisfactory as a lot of haemorrhages which occurred and recurred into the anterior chamber were due to the wound opening and the blood leaking in from the conjunctiva.

3. The corneal section was at the beginning made too small, the section should be half the cornea in size and the section should be checked with a spatula, as there is a tendency to have the counter-puncture higher up than the puncture; if this happens the section should be enlarged with scissors.

4. Dilatation of the pupil with homatropine early on the morning of operation. In one case where atropine was used an attack of glaucoma occurred. Where the pupil does not dilate a complete iridectomy is made.

5. A bloodless field is essential, and where haemorrhage has occurred into the anterior chamber the blood should be allowed to clot and then washed out.

The chief causes of ruptured capsules were: 1. Too small a section. 2. Faulty pressure with hook and unnecessary traction with the forceps.

Complications.—Loss of vitreous in three cases; in one of these the vitreous was fluid, this had been anticipated. In a second case vitreous was lost due to trauma with the spatula while replacing the iris. There were 3 cases of post-operative iridocyclitis; two were due to dental sepsis, but the third case occurred after an operation in which there had been a minimum amount of trauma. The iris prolapsed in one case.

After operation eserine is put in and homatropine used the next day unless the pupil is markedly contracted, when atropine is used. In 13 cases haemorrhage occurred into the anterior chamber. Any serious haemorrhage which filled the anterior chamber was in my opinion directly due to trauma.

Visual results:

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Visual results:
The visual results were therefore that 60 cases out of 67 had vision of 6/12 or better. There was in many of the cases some striate keratitis present on discharge from hospital.

Cause of low visual results.—One patient died on the fifth day from a heart attack, another patient had a detached retina and previous to operation had poor projection. A third patient had a severe post operative attack of iridocyclitis causing occlusion pupillae. Two patients with vision of P.L. had gross fundus changes, and one patient with vision of 4/60 left hospital before a post operative haemorrhage had absorbed.

Of the 33 cases in which the lens was not delivered in its capsule, four lenses were intumescent. I was unable to dislocate eight lenses because after the retro-bulbar injection the eye became so soft that I was frightened to use enough pressure with the hook to do this. In 21 cases the capsule ruptured, as a matter of fact some of these ruptured as the lens was presenting through the corneal section and were really intra capsular extractions.

Anxiety to get the lens out quickly, too much traction with the forceps were contributing factors to the rupturing of capsules; any movement with the capsule forceps should be slow and deliberate.

Visual results were:—

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<th>Vision</th>
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<td>6/6</td>
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<td>6/9</td>
<td>10</td>
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<td>6/12</td>
<td>4</td>
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<td>6/18</td>
<td>6</td>
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<td>P.L.</td>
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<td>Nil</td>
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27 6 33

Complications.—Expulsive haemorrhage in one case; a second eye was lost from panophthalmitis. There were two cases of loss of vitreous. Cortex and capsule remains were the cause of low vision in 9 cases.

Summary.—A first hundred cases of cataract operation are reported in which the intra capsular operation was attempted. The complications and difficulties encountered are discussed.
A First Hundred Cases of Intra-Capsular Cataract Extractions
J. B. McArevey

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