Original Communications.

TEN YEARS OF OPERATIVE SURGERY IN THE PROVINCES.

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V.—OPERATIONS ON THE EYE.

[Continued from page 168.]

Needle Operations for Cataract. My needle cases are not nearly so numerous as the others. I have divided them into congenital and acquired, and will begin with the description of the former, as briefly as possible.

CASE CCCI. F., aged 11 months. The right eye had been operated upon before, and with success; I depressed the capsule and lens, and the eye became clear. The capsule partially reappeared in the sphere of vision, but the eye improved and lost its unsteadiness.

CASE CCCII. F., aged 9 months. I broke up both lens through the sclerotic. At a second operation the capsule which had become opaque was depressed. She got on well for some years, and when I saw her again there was some little capsule in the pupils. This I removed by the small pointed cannula forceps, first from the right eye, and subsequently from the left. She has been able to see fairly, but there is an imperfection in her vision so that she cannot see to read.

CASE CCCIII. M., aged 17, a dull boy, whose parents had allowed him to grope about in blindness for this number of years, within five miles of Bristol, and in a village whence patients continually come in for advice and treatment in their eye-complaints. He had besides a cleft palate. I operated on both eyes with a needle posteriorly, and broke them up freely. He had vomiting at night. After the first day he went on well, and the pupils cleared, and he went home and was able to see to work in the fields.

I published this case in the JOURNAL many years ago, and will now only add that it demonstrated many of the interesting phenomena of the correlation of sight and touch most satisfactorily.

CASE CCCIV. M., aged 8 months. I broke up both lenses completely, by needle through the posterior chambers, and in a week the left eye was clear, and the right almost so, and he was taken home with good sight.

CASE CCCV. F., aged 7 months. Both cataracts were well stirred up through the sclerotic, and after a short time the child apparently saw well, although some capsule remained in each pupil.

CASE CCCVI. M., aged 8. I operated on both eyes, and broke up the cataracts. He was excessively boisterous and noisy, and afterwards so sulky that I could only judge of him *objectively*. His eye became tolerably clear and he appeared to see better. He had an attack of inflammation in the cornea a few days after the operation.

CASE CCCVII. F., aged 18. She could just see enough to walk alone, but not to work. I operated on the right eye first and depressed the lens and capsule. She went on well, and had a clear pupil and good sight; i.e. she could see the figures on my watch without a lens. I afterwards operated in the same way on the other eye, with like success.

CASE CCCVIII. M., aged 13 months. The mother says that at birth the child's eyes were natural, and that it could see then. I broke up both the lenses, and they became partially absorbed. An operation was subsequently performed on each eye to remove some capsule, and he now sees well.

CASE CCCIX. F., aged 7 weeks. This was a case of

great interest. The mother, a sensible woman, the wife of a man who kept a little shop, brought to me a child about 2 months old, to ask what was to be done for the eyes. I told her that a slight operation was necessary, and she went away. In a few weeks (or less) I heard that the child was dead, and I made a *post mortem* examination, and could only conclude that it had died of starvation. The mother was so distressed by my telling her that the child must undergo an operation that her breasts ceased to secrete and the child died. The next child that was born had good eyes, and this was followed by the subject of this account, a child with cataracts. I operated and broke up both the cataracts satisfactorily, and the case promised very well. About a fortnight afterwards I called, and found it was dead. It had died in its mother's arms in the night, and had evidently been accidentally suffocated. I made a *post mortem* examination. After this the woman had another seeing child, and then again one born with cataracts, which was brought to me: I advised an operation, but I never saw it again.

CASE CCCX. F., aged 9 months. I operated on both eyes and broke up the lenses which were glistening and brittle; and fine splinters, almost like pieces of crystal, flew off into the anterior chamber. The lenses were absorbed, and the case did well. The child sees fairly now.

CASE CCCXI. F., aged 33, had cataracts from childhood, but they were not very opaque, and she could see to do ordinary household work. I operated on the left eye which was least useful to her, and broke up the lens through the posterior chamber. She suffered considerable pain for two days, but afterwards she recovered well and her sight was much improved.

CASE CCCXII. M., aged 25, had been partially blind from birth, but he had been able to see to work as a miner, an employment well suited to such cases, and his sight had been getting much more impaired. I broke up the left lens which was absorbed and his sight much improved. On a subsequent occasion, he came up to Bristol, and I operated on the right in the same way; he went home with good sight.

CASE CCCXIII. F., aged 9 months. The mother said that the child had good sight for two months. I broke up both lenses freely from behind, and the case did perfectly well.

CASE CCCXIV. F., aged 9 months. A similar case to the last. No symptoms followed the operation, and the child recovered well.

CASE CCCXV. F., aged 4 months. I operated on the right eye and broke up an opaque capsule, and on the left, in which was a more dense cataract, and where a white nucleus slipped into the anterior chamber and remained there. No inflammation of any kind followed and the case did well.

CASE CCCXVI. F., aged 4 months, I operated on the right eye and broke up the lens, and Mr. Leonard, who assisted me, did the same with the left eye. The child cried but little, and was going on perfectly well when it was taken home into the country, many miles away from Bristol.

CASE CCCXVII. M., aged 4 months. An exactly similar case to the last in every respect.

CASE CCCXVIII. F., aged 8. I had seen this patient some years before, and she had at that time merely a central capsular cataract, as it is called, but a fair amount of sight, and I advised no treatment. Afterwards the lenses became dull and the child was blind, the central spot being still very visible. I broke up the left (the worst) cataract from behind, and although I did it freely and the lens was comminuted the white spot remained and the needle seemed to pass through it as in a shadow. It was apparently a reflection from the deeper structures of the eye. The patient did very well, and has good sight with this eye.

In the following two cases the operation did not succeed.

CASE CCCXIX. M., a pupil at the blind asylum, who had large white pupils, bright inside, and dense white capsules. He saw the light. I removed the capsules with a needle; but he saw no better, being amaurotic.

CASE CCCXX. M., aged 15 months, a weakly child with opaque capsules and small adherent pupils. I operated with a needle on both eyes, depressing the capsule. The child had been ill and was cutting its teeth, the gums being in a state of suppuration. It died on the fifth day after the operation.

CASE CCCXXI. M., aged 20, a miner, who had always had cataracts, but could see to work. I operated upon one eye, with the needle, and broke up the cataract, until it seemed tolerably equally diffused through his aqueous humour. He complained much at first that his sight was worse than before the operation, but it afterwards cleared, and ultimately this eye was the best.

Thus, with the exception of the amaurotic boy from the blind asylum, and the unhealthy child which died, all my cases of operation for congenital cataract were successful.

The next series, of about forty cataract cases, contains those where the disease was not congenital, and a needle operation was performed.

CASE CCCXXII. M. aged 26, had undergone an operation on the right eye for cataract before I saw him, and he wished to be cured in the left eye also, in which he had had a cataract eleven years. I operated on the left eye and he was speedily cured, and saw to work well with it.

CASE CCCXXIII. M., aged about 25, the brother of the last case, who had had cataract in the right eye for thirteen years, and in the left a year. I broke up the cataract in the right, and he obtained excellent sight. About three years afterwards, I operated on the left eye; and when he left Bristol, his sight was improving, but was far from good in this eye, being excellent in the other. I have no further report of him.

CASE CCCXXIV. F., aged 28, blind in the right eye with adherent capsule and iris with opacity of the lens; in the left eye there is opaque capsule. I removed this by means of a corneal section and the cannula-forceps, and left a bright black pupil. She saw well at once, and it remained well, and she went home to be married.

CASE CCCXXV. F., aged 19, with cataracts of six months standing. I operated on the right eye with a curved needle through the cornea, breaking up the anterior capsule, and in the left eye I broke up the lens with the same needle through the sclerotic. He had more pain in the left than the right, but absorption went on favourably in both, and she was cured.

CCCXXVI. M., aged 35. The left eye was defective in sight, and had formerly been operated on for strabismus. The right eye was injured by a piece of iron or rust some months before I saw him, and it gradually became more dim; and when the cataract was fully formed, a brown spot was visible on the capsule. I operated, and opened the capsule through the cornea, and touched the brown spot, which disappeared suddenly, and was. I have no doubt, a bit of iron adherent to the lens. Nothing more was seen of it, and he recovered, with excellent sight.

CASE CCCXXVII. M., aged 30, with dim vision coming on for nine years. I operated on the left eye through the cornea, and the lens became more opaque, and was afterwards absorbed, but not for some weeks. In the mean time, during my absence, a friend operated on the right eye, and the lens was absorbed, but opaque capsule occupied the pupil. This I removed with the cannula-forceps, and he obtained excellent sight in each eye.

CASE CCCXXVIII. F., aged 21, with cataract in both eyes, of three months standing. I operated on the right

eye with the short needle, known as Jacob's, and broke up the lens by a drilling motion, without disturbing it from its position; then, with an ordinary straight needle, I broke up the left cataract from behind. On the sixth day, she could see fairly with both eyes, and looked about a good deal; and on the seventh, inflammation and headache came on. This increased considerably for two days; and I gave her compound calomel pills, belladonna to be applied to the eyes, and blisters to the temple. Under this treatment, she recovered completely; and I saw her many months afterwards with excellent sight in both eyes.

CASE CCCXXIX. M., aged 25, with fully formed cataracts in both eyes. I operated on the right with a curved needle through the cornea, and the left lens I depressed from behind. Considerable inflammation followed. He recovered with good sight; the left eye being better than the right.

CASE CCCXXX. M., aged 44. He was a weak diminutive child, who had just learnt to walk; and the lenses had become opaque shortly before I saw him. I broke up both lenses from behind; and the child, who cried but little, and did not appear to feel much of the operation, evidently saw better afterwards. He went on well; and when I saw him, some months later, he had a central clear pupil and fair sight.

CASE CCCXXXI. M., aged 22. He had internal strabismus and cataract of the right eye, following an injury. I divided the inner rectus, and then broke up a thin biscuit-like lens with a needle through the sclerotic. A good deal of inflammation followed, and it was necessary to blister him and give mercury; under which treatment the bad symptoms subsided; and he went home with his pupil getting much clearer.

CASE CCCXXXII. M., aged 47, with well formed cataracts in both eyes, coming on gradually at first, but subsequently very rapidly; for he said that he could see to work at his calling (harness-making) four days before I saw him, and then he could not see to walk alone. I operated on the right eye (the most recent cataract) with a needle through the cornea, and partially broke up the anterior capsule, but the left was more efficiently done. After a few days, some inflammation came on, for which I treated him with belladonna, mercury, and blisters, and he improved and went home, but returned in three months, suffering pain. The left eye was tolerably clear, and he had fair sight; the right was inflamed from the pressure forward of the nucleus of the lens. I made a lower section, and removed the lens easily; but the operation was very painful, owing to the inflamed state of the eye. He went away with a large clear pupil and excellent sight.

CASE CCCXXXIII. M. aged 40. The cataract in the right eye had been successfully removed by a colleague, but the sight was imperfect. I operated on the left, breaking up the anterior capsule, and a quantity of opaque fluid flowed into the anterior chamber. I subsequently depressed a portion of the nucleus that remained, and he did very well.

CASE CCCXXXIV. M. aged 30, with cataract in the left eye, the result of gonorrhœal ophthalmia. He was very anxious to have the deformity removed, and I therefore broke up the lens.

CASE CCCXXXV. F., aged 16, with fully formed cataracts of a year's standing. I operated on both eyes with a straight needle through the posterior chamber. She had vomiting afterwards, but subsequently she went on well, and had very good sight. She was apparently much improved in intelligence soon after the sight was restored.

CASE CCCXXXVI. M. aged 50. Both eyes had been operated on some years before I saw him, by a surgeon in the country, and the right had suppurated, while the pupil of the left was partially obstructed. I broke up the lens again through the sclerotic, and he recovered

after a short time with very good sight, able to read with a suitable glass.

CASE CCCXXXVII. F., aged 20, with single cataract and adherent iris of the right eye. I tried to depress the capsule, for such it proved to be, as she was anxious to be rid of the deformity, but the point of adhesion seemed to hold it. The next day the opacity was as before, but her anterior chamber was discoloured, being of a green hue, and a few small vessels were to be seen ramifying in the capsule from the adherent point; the sclerotic vessels were full. On a subsequent occasion I made a section in the cornea and with the cannula-forceps drew out the opaque capsule, leaving a clear pupil and fair sight.

A point of interest in this case is the discoloration of the anterior chamber, due to a slight effusion of blood from my dragging upon the adherent iris during the operation. A blow upon a healthy eye, a minute puncture will not unfrequently produce the same result, and the effusion of blood under the conjunctiva following the rupture of a small vessel during the strain of coughing or sneezing sometimes encroaches under the conjunctival layer of the cornea and gives rise to exactly the same appearance. A case of the latter kind is mentioned in Mr. Lawrence's work on *Disease of the Eyes* (p. 138), where the cause of discoloration was not discovered, although the patient had considerable effusion under the rest of the conjunctiva, and when he was subjected to cupping and mercurial treatment, when time alone was sufficient for the cure.

CASE CCCXXXVIII. M., aged 26, with cataract of five years' standing, from an injury with an awl. He was anxious for an operation to get rid of the deformity. I therefore operated with a needle and broke up the lens and capsule. He complained of great pain, and was rather hysterical. The case did perfectly well.

CASE CCCXXXIX. M., aged 11. A boy with very imperfect organs of vision, one having sloughed from purulent ophthalmia at birth, and the other being much damaged by adherent pupil, and opacity of the lens. I operated on the latter (the left) with a needle through the sclerotic. He was very sick afterwards, but went on well, and his sight was much improved.

CASE CCCXL. F. aged 37. This case was similar to the last. The right eye was flat and sightless. The left cornea was opaque below, and above was a large artificial pupil (made by the late Mr. Scott) blocked up by a cataract. I broke up the lens with a needle, and after the usual accompaniment of twenty-four hours' sickness, she did very well.

CASE CCCXLI. M., aged 30, with cataract of the left eye, very opaque and white, and incipient cataract of the right. I operated on the left, through the cornea, and numerous flocculi fell forward into the anterior chamber. About a month afterwards I touched it again, and he went home with fair sight, there being a central clear hole. Two years after this he came up again, to try to get his sight improved, as he was now quite blind in the right eye. He was extremely weak and thin, and appeared phthisical. I removed the capsule of the left eye with the cannula-forceps through a small corneal section with great ease, and I then depressed and partially broke up the right lens. The case went on very badly; vomiting and great pain followed the operation, and his left eye suppurated entirely. The remedy that relieved him most, was quinine. He went home after a time, and the sight in the right eye was gradually getting better.

CASE CCCXLII. F., aged 16, with cataract in the left eye only. She was anxious to be cured of the deformity. I operated and broke up the lens completely, and some portions started forward into the anterior chamber. In seven weeks the whole of the opaque part was absorbed, and she had fair sight.

CASE CCCXLIII. M. aged 25; unable to work in con-

sequence of dulness in the left eye and capsular cataract in the right. I depressed and broke up the latter, and his pupil soon became quite clear. The sight in the left eye, which seemed to be very clearly in an amaurotic state, became much better by use.

CASE CCCXLIV. M., aged 30, had met with accidents (at separate times) in both eyes; the left was punctured with a pen and the cornea became partly opaque and prominent with adherent capsule. The right had also had cataract which had been cured; but at a subsequent time a blow had destroyed his sight again. I operated on the left eye, his now only remaining chance, and broke across some of the adhesions of the capsule, and depressed it: his sight was much improved.

CASE CCCXLV. M., aged 49, had cataracts and prominent and opaque cornea. He could see (as is usually the case) better in the dusk or on a dull day, but could not see close objects. I depressed the right lens, and after a time it dissolved, and his sight was much improved.

CASE CCCXLVI. M., aged 56, with capsular opacity in the left eye, adherent pupil, opaque cornea, and tremulous cataract in the right. I operated first upon the right, and depressed the cataract. In the left I tried to remove the capsule but could not do so. His sight in the right became very good, but the left lens, in its turn, became tremulous, and I reclined it after a time, and he recovered very good sight. He could tell the time by the church clock without a glass, and with a four-inch lens sees near objects clearly.

CASE CCCXLVII. F. aged 52. Double cataract. I extracted the left by lower section. She was a very nervous old woman with prominent brows and sunken eyes. The operation was performed with some little difficulty, and a very dark lens removed. She went on perfectly well for a while, but inflammation came on, and she went home with a closed pupil. I, at a subsequent period, reclined the lens in the left eye, and she saw well for about twelve days, when after a severe fit of coughing she found herself blind again, but in two days the cataract fell again out of the way, and she went home with good sight.

CASE CCCXLVIII. F. aged 27. Left eye sunken; right eye had corneal opacity, following small pox, and also cataract which had existed since she was three years old. She saw merely the light, but was very intelligent. I have published this case at length in the JOURNAL. The patient recovered her sight at once, and all the phenomena connected with the process of learning to see and to recognise by sight what she perfectly well knew by touch, were most marked and interesting.

The few remaining cases of needle operation were either unsuccessful, or no strict record was kept of the result of the operation.

CASE CCCXLIX. M., aged 60, with amaurosis of the left eye, and cataract with adhesion of the pupil in the right. He saw the light with both. I depressed the cataract in the right and he recovered considerable sight in it, and the left mended, on the restoration of vision to the other eye. After three months I operated again, and removed the capsule which still obstructed vision a little: inflammation followed, which was overcome by leeches and other appropriate treatment, but he had no sight in the eye, and he went home well satisfied with the improved vision of the originally amaurotic eye.

CASE CCCL. F., aged 38, with double cataract. I depressed the right lens, and she had good sight until the eighth day, when the lens re-ascended and the eye became inflamed; leeches, belladonna, and opium were used. I then operated on the left eye, and the same series of symptoms followed in the same order; and when she returned home the eyes were weak, but the sight was improving.

CASE CCCLI. M., aged 21, with a hard-looking cataract in the right eye, from a blow in his childhood. I

broke up the cataract more to get rid of the deformity, which interfered with his getting employment, than for the sake of restoring his sight. I operated with a needle through the sclerotic and broke up the lens easily. Pain came on, and a good deal of inflammation, and I bled him, and after that he went on fairly for a time. Leeches and belladonna were again applied, and at last the portion of lens which had fallen into the anterior chamber was absorbed, and the irritation ceased. He was well pleased with the result of his case, but his sight was very imperfect.

CASE CCCCLII. M., aged 35, with very recent cataracts. I operated on the right lens and broke it up through the sclerotic. He saw the needle moving about in his eye. He went away with the pupil blocked up by a considerable portion of the lens. I performed, at a future time, another operation upon this eye with a needle and got rid of the rest of the lens, but his sight was not materially improved. I afterwards operated upon the left eye and broke up the lens and capsule thoroughly. The pupil was clearing when he went home, but I never heard whether he regained his sight.

CASE CCCCLIII. M. aged 26. Had complete amaurosis in the left eye, of nine weeks standing, but had had a capsular cataract in the right for four years. I operated and depressed the lens, and his pupil remained clear, but his sight was no better. The other eye was, in the mean time, treated with mercurials, blisters, and turpentine, and when he went home his sight had improved a little but was very imperfect.

CASE CCCCLIV. M., aged 59, had been blind four years from an injury to the left eye by a twig, which produced cataract and adherent iris, and twelve weeks before I saw him he injured his right eye in the same way. The latter lens I extracted, and the former I depressed; when he recovered, both eyes were tolerably clear but his sight was no better.

CASE CCCCLV. M., aged 20, with opaque capsule following iritis, of four years standing, which he was anxious to get rid of, on account of the deformity, as he lost his situation as shopman in consequence of it. His eye recovered after an attack of inflammation, and he went away with a clear pupil, but very indistinct sight.

CASE CCCCLVI. M. aged 30. The right eye was lost from corneal disease, and the left was injured by a piece of iron, producing distorted pupil and opaque lens. I broke up the lens, and his sight improved very much. At a subsequent operation, I removed a portion of capsule which still blocked up the pupil and he had good sight for six days, when suddenly a clot of blood was found filling his interior chamber, and severe inflammation followed. He was treated actively but to no purpose, and he is, I believe, at the present time quite blind.

CASE CCCCLVII. F., aged 19, with fully formed cataract in the right eye, and very dim and myopic sight in the left. I drilled a hole in the anterior part of the lens by means of a curved needle introduced through the cornea. No symptoms of any consequence followed, and the eye became amaurotic. The other eye is in the same state and she is quite blind.

CASE CCCCLVIII. M., aged 50, a tremulous subject with fully formed white cataracts. He had the appearance of being an intemperate man, which, however, I believe was not the case; I broke up the right lens through the cornea, and small portions fell into the anterior chamber. A severe attack of inflammation followed, and I made a section in the lower part of the cornea to get rid of the lens which seemed to irritate the eye. When he recovered from this he had very little sight, and was so weak that he could scarcely walk.

[To be continued.]

PUERPERAL CONVULSIONS SUCCESSFULLY TREATED BY CHLOROFORM.

By FRED. PAGE, M.D., Landport.

ON Feb. 14, Mrs. S., a woman about 30 years of age, in every respect healthy, and naturally of a cheerful disposition, at the full period of pregnancy with her sixth child, was suddenly seized with convulsions about mid-day. When I saw her, she had had seven or eight severe attacks in an hour. She was lying in a state of coma, with stertorous breathing, contracted pupils, pulse full, strong, about 80. She had a severe paroxysm soon after I arrived, with violent struggling, foaming at the mouth, etc., which left her, as before, in a state of lethargic sleep.

The os uteri was intact; there was not the slightest disposition to dilate; nor was there any symptom of approaching labour. She was bled to sixteen ounces. A violent fit ensued. I then kept her under the influence of chloroform for half an hour, and waited another half an hour; no fit occurred. A turpentine enema was given; and a blister was applied to the neck.

At 6 p.m., she had had convulsions at intervals. At the moment of my entering the room, the child was expelled suddenly during a fit. The placenta followed at once, and the labour was complete. The patient was still insensible, with rapid convulsions. The enema operated well. I again used chloroform for half an hour.

10 p.m., four hours after labour. The patient was very quiet, sleeping; there had been no return of the convulsions.

Feb. 15, 8 a.m., sixteen hours after delivery. She had been in convulsions during the night. I found her at 9 p.m. much as I left her the night before, in profound sleep. She had convulsions whilst I was there. Chloroform was again given for half an hour; after which she had no attack. Sensibility gradually returned, but it was some days before she quite recovered. She and her child are now quite well. I may remark that she has not the slightest recollection of anything that happened during her illness.

REMARKS. This was a case which assumed what is called the apoplectic form, in contradistinction to the hysteric, and in which much doubt has been expressed as to the propriety of exhibiting chloroform. In reviewing this case, it is evident that chloroform checked the attacks. It was used at three distinct periods: 1. Before delivery, preventing them for two hours; 2. Directly after delivery, for four or five hours; 3. Sixteen hours after delivery, when they ceased.

The first anxiety in puerperal convulsions is to empty the uterus and bowels as early as possible; but convulsions continued for twelve hours after the former had taken place. I must conclude that bleeding, the use of chloroform, and early emptying the uterus, are the grand remedies in this disease—especially chloroform. I shall be glad to hear more of its use in these cases.

NEW USE OF COWS. The health officer of Brooklyn, New York, in relation to the prevention of small-pox, says:—"In order to relieve the minds of parents in relation to the quality of (vaccine) matter to be used upon such occasions, and also to meet the wants of the medical profession in this city in particular, I would recommend that a cow be set apart, and kept at the grounds of the almshouse or elsewhere for this especial purpose, from which fresh (vaccine) matter could always be obtained. The authorities of Boston have for several years, in this manner, and with effect, supplied the profession in that vicinity."