

symptoms cleared up when nasal trouble was treated seemed to show that the cause was pressure of fluid rather than actual sepsis. Radical measures should never be undertaken during acute intranasal infection; it might mean disaster to the eye, or even to life. At this stage the surgeon should be satisfied with providing free drainage. He had seen iritis, cyclitis, and some internal affections of the eye quite cured by intranasal operations. He had never seen a case of orbital cellulitis in which sinus suppuration was not present.

MR. LAWSON WHALE brought out, by means of an epidiascope demonstration of selected skiagrams from his war experiences in France and England, a number of points of practical importance in diagnosis and treatment.

After a few closing remarks by the Chairman, the four openers briefly replied.

H. DICKINSON.

COLORADO OPHTHALMOLOGICAL SOCIETY.

March 1, 1919.

DR. C. A. RINGLE, Presiding.

Glaucoma Simplex.

H. R. STILWILL and MELVILLE BLACK, Denver, presented a man of fifty-three years who had a simple glaucoma in both eyes, and on whose left eye corneoscleral trephining had been done. The patient had come on October 3, 1917, on account of moderate blurring of vision. The pupils were rather large and sluggish, the anterior chambers shallow, and the tension of either eye 55 mm. with the Schiötz tonometer. There was cupping of both disks, more marked in the right eye. The vision at this time was R. 4/4, L. 4/5. Under eserine the vision improved and remained normal until October, 1918, when it dropped to R. 4/5, L. 4/6. On January 17, 1919, Dr. Black performed sclerocorneal trephining on the left eye, combined with iridectomy. The vision before operation was R. 4/7, L. 4/20. The vision recorded on February 18, 1919, was R. 4/7 part, L. 2/60. The

anterior chamber had remained completely empty for about a month after the trephining was done, and then gradually refilled. The tension then gradually came up, but was still subnormal (17 mm.). The reduction in vision had apparently continued speedily after the operation. The glaucoma cup, which had never been marked, was about the same. Dr. Black remarked that it was a serious question what was best to do for the other eye, since iridectomy had not proved very successful in simple glaucomas. The patient was approaching the point where he could not do his bookkeeping satisfactorily. The vision in the good eye was now 20/40 part, and eserine did not seem to be holding it, but the eye was changing for the worse fairly rapidly. The tension remained about 40 mm. all the time. The visual field of this eye showed comparatively little contraction.

DISCUSSION. J. A. McCaw, Denver, mentioned a recent report in the literature, of a case in which atropin was used in the presence of subnormal tension and brought up the vision.

Dr. Black said that the operated eye had been kept under atropin until three or four weeks ago, but that the atropin had not improved the tension.

Edward Jackson, Denver, pointed out that the field which had been shown for the operated eye had been taken on the second of December shortly before the operation, and indicated that at this time the boundary of the field was cutting pretty close to the fixation point. The boundary was probably closer to the fixation point than the chart would show, as such patients do not fix very accurately. It often happens that operations on such eyes are followed by a further limitation of the field which carries it beyond the fixation point. In one case seen in consultation some years ago, the patient could read with the eye before operation, but after operation the eye was entirely useless. The operation is not to be blamed on that account, but this is one of the risks which have to be taken in operating on such an eye. The patient should probably be advised

to have an operation done on the second eye, and the best operation might be a Lagrange with a rather large iridectomy.

E. R. Neeper, Colorado Springs, was disposed to try the effect of the high frequency current, and would do a simple iridectomy on the second eye.

H. M. Thompson, Pueblo, emphasized the possibility of a toxic basis for glaucoma, and recalled a case which he had shown two years earlier in which removal of streptococcic tonsils had apparently checked the course of glaucoma.

C. E. Walker Denver, thought that it was seldom found that the points which Dr. Thompson had mentioned had anything to do with this form of glaucoma. A decrease of vision after operation was fairly frequent. As to the second eye, the reduction of vision under the best treatment made iridectomy the thing. In association with the iridectomy it would be advisable to use the procedure of Priestley Smith, scleral puncture with a Lang knife (slightly smaller than the Graefe), then through an incision one-fifth the corneal circumference to make a large iris excision, cutting first to one side and then to the other, and pulling on the iris until it tore.

Dr. Stilwill stated that the patient's physical condition had been gone over thoroly, but his teeth were perfect, and he had never had any illness apart from the eyes.

Dr. Black did not feel disposed to do posterior scleral puncture except as a last resort in blind and inflamed eyes. He was afraid of cutting a large choroidal vessel.

Dr. Walker said he had never cut such a vessel in doing this operation.

Keratoconus.

H. R. STILWILL, Denver, presented a man of thirty-four years the vision of whose eyes had been failing for the past six months. The uncorrected vision of the right eye was 1/60, of the left eye counting fingers at two feet. With R. —15.50 sphere combined with —3.50 cylinder axis 145 degrees the

vision was 4/60, and with L. —15.50 sphere combined with —3.50 cylinder axis 60 degrees the vision was 4/15. There was marked conical cornea in each eye. The patient had been given a weak solution of pilocarpin. No disturbance of the corneal tissue except the conicity could be made out. The periphery of the cornea and of the anterior chamber could be seen thru the conical cornea better than with most eyes.

Melville Black, Denver, thought that we were disposed to overestimate the amount of astigmatism in these cases. He had found it pay to start in arbitrarily with an estimated plus cylinder and work behind it with a minus sphere, afterwards adjusting the axis of the cylinder.

J. A. McCaw, Denver, had found it advantageous to test such cases under pilocarpin.

Edward Jackson, Denver, advised treating these eyes with pilocarpin over long periods.

Vernal Conjunctivitis.

E. R. NEEPER, Colorado Springs, presented a young man of eighteen years both of whose upper eyelids presented on the tarsal surface the typical cobblestone formations of vernal conjunctivitis. There had been the usual symptoms of redness, itching, swelling of the lids, and watering of the eyes, with improvement in cool weather. A sister had the same symptoms with a good deal of pain. The enlarged papillae inside the upper lids were rather distinctly pedunculated. The cornea of the right eye presented a superficial ulcer a little above the center. X-Ray and radium treatment had been advised, but not been used to date.

DISCUSSION. Edward Jackson, Denver, referred to a case which he had reported some years previously to the Colorado Ophthalmological Congress. This patient had recently returned. He had got into the naval training school, but was finally turned down on account of his eyes. He had recently been put under radium, with beneficial results.

Shrunkened Eyeball Following Pneumonia.

C. O. EIGLER, Denver, presented a girl aged four and a half years who was said to have had pneumonia with convulsions at two and a half years, and to have subsequently developed severe pain in the head over the left eye, lasting eight days. Upon recovery from this condition the eye turned in and was blind. The eyeball was small, sunken in the socket and soft. It was still sensitive to light in the mornings.

DISCUSSION. Melville Black, Denver, believed that the original condition had been a choroidal disturbance metastatic from pneumonia. It was probably better to leave the eye in a growing child, postponing the question of removal for later consideration.

Edward Jackson, Denver, suggested that if there was no irritation from the eye, it was just as well to leave it alone. It was, however, the sort of eye which might produce sympathetic irritation; and this, while not likely to destroy the other eye, might interfere with the use of the good eye. As regards the development of the orbit, Dr. Jackson had seen a girl of 16 whose eye was removed some fourteen years previously, yet it was impossible to discover any difference in the development of the two orbits.

C. E. Walker, Denver, emphasized the fact that in most of these old cases of choroiditis there was later on a bony formation which acted as an irritant, so that he believed it would be better to remove the eye before such a condition developed.

J. A. McCaw, Denver, asked how an opticociliary resection would serve in this case.

Dr. Black replied that enucleation would probably be better if the eye were keeping up interference with the use of the other eye.

Strabismus Under Voluntary Control.

W. C. BANE, Denver, presented a man of twenty-one years who had had a diverging strabismus of the left eye since childhood, without other symptoms. The divergence was probably sixty or more centrad, but was made

difficult to measure by the ability which the patient had to draw the left eye in so that it was in line with its fellow.

DISCUSSION. C. E. Walker, Denver, believed that in such a case the best operation would be an advancement, with in all probability a tenotomy at the same time.

E. R. Neeper, Colorado Springs, had never had much success with advancement, but got better results with resection.

Steel in Anterior Chamber.

E. E. McKEOWN, Denver, presented a man whose left eye had been struck by a small piece of steel while he was driving a pin into a wheel. The foreign body had become embedded near the center of the cornea, and the home physician had unsuccessfully attempted its removal. On examination by Dr. McKeown the cut in the cornea was found, but no foreign body. The steel had apparently been pushed into the anterior chamber, in the angle of which it was shown by the X-ray, altho invisible to the eye of the examiner. Was it possible to remove the piece of steel from this location, or should it be left in place?

DISCUSSION. Melville Black, Denver, suggested the possibility of bringing the tip of the hand magnet into contact with the foreign body, but thought it might be well to wait a while and see what happened.

C. E. Walker, Denver, recommended the use of small tips for attachment to the giant magnet.

Edward Jackson, Denver. The value of the giant magnet is that it works at a longer distance. There is less power right at the tip of this giant magnet than there is an inch or so away. The small tips attached to it make it very much more more serviceable. A Dutch ophthalmologist has recently written a valuable paper on the withdrawal of foreign bodies from the anterior chamber. He uses a T-shaped incision, an incision parallel to the margin of the cornea, and an incision at right angles to it; and thus succeeds in getting out

foreign bodies which cannot otherwise be got at.

Sarcoma of the Ciliary Body.

H. M. THOMPSON, Pueblo, reported a case of mixed cell sarcoma of the ciliary body. The patient, a woman of forty-four years, first experienced visual disturbance in the right eye in November, 1915. There was a gradual development of pain in the eye and on the same side of the head. A little over three weeks later, after having failed to obtain relief from a nasal operation done by a traveling surgeon, she consulted Dr. Thompson. The eyeball was stony hard, the lens cataractous, and the general condition of the eye was that of absolute glaucoma. On opening the enucleated eyeball, a light gray mass, the thickness of a small pencil and slightly flattened, was found behind the iris, and taking origin from a definite point in the ciliary body. The other end of the cylindric mass was free in the vitreous. The ciliary body was not infiltrated by the sarcoma, nor had any other tissue of the eye seemed affected except by the changes incidental to the glaucoma. Dr. C. W. Maynard, pathologist, reported the tumor to be a mixed cell sarcoma practically free from pigment.

Calcareous Lens in Anterior Chamber.

EDWARD JACKSON and MELVILLE BLACK, Denver, exhibited a calcareous lens which had been removed from the anterior chamber, into which it had apparently migrated after remaining for a long time in the vitreous. The patient, a woman of fifty years, had apparently undergone two operations, at the first of which iridectomy was done on account of previous inflammation which had left the pupil adherent to the lens, and at the second of which (three years ago) the cataractous lens had been pushed back into the vitreous. The lens had come forward in the anterior chamber three weeks ago, and had stayed there. The shrunken lens, yellowish white in color, was removed through a large corneal incision above. A more than the normal amount of aqueous humor escaped, the

excess being regarded by Dr. Black as having come from the portion of the vitreous which had contained the dislocated lens. The eye then collapsed badly, but after waiting ten minutes it was possible to remove the cataract from the anterior chamber with a wire scoop. The wound healed readily and almost without reddening the eyeball. The extracted lens proved to be calcareous shell, six or seven millimeters in diameter.

WM. H. CRISP, Secretary.

CHICAGO OPHTHALMOLOGICAL SOCIETY.

A regular meeting was held March 17, 1919, with the President, DR. WILLIAM L. NOBLE, in the chair.

Gumma of the Iris.

DR. N. C. NELSON exhibited a young man with a tumor of the iris which was diagnosed as a gumma. Patient had been placed under treatment with mercurial inunctions and the iodids, and the gumma had begun to disappear.

Dr. Noble asked how long it was since the iodids were begun, to which Dr. Nelson replied about two and a half weeks.

Xeroderma Pigmentosum.

Dr. Nelson also showed a patient stating that the case really did not belong to this department except that one could see the thickened condition of the lower lid and the ectropion, and in these cases the cornea generally became ulcerated. In other words, there was an ulcerative keratitis. The condition was known as xeroderma pigmentosum and generally began in the very young. It began from six months up to four or five years. The pigment very much resembled freckles which appeared on the exposed surfaces, such as the face, neck and extremities. The pigment became deeper, and a little later on there was a warty appearance as was seen in this case, and still later ulcers developed. The tendency was for this condition to take on the malignant epithelial type. The prognosis was generally fatal. The sun and wind