

the patient still had trouble in enunciating words, and his tongue was somewhat "thick." The drug was from a fresh bottle just obtained from a wholesale house of repute, and manufactured by a prominent chemical company. The case should, however, perhaps be regarded as one of acute hyoscin poisoning.

DISCUSSION. D. H. Coover, Denver, about the time William Thomson was using duboisin a good deal in 1878, instilled a one to two hundred and fifty solution of that drug in a patient's eye about 9 a. m. About 10 a. m. she commenced to develop peculiar symptoms, including hallucinations and a general paralysis. There was no control of either urine or bowels, and it took physicians a whole day to bring her out of the condition.

C. O. Eigler, Denver, had had two cases of temporary paralysis from the use of hyoscin solution.

WILLIAM H. CRISP,
Secretary.

SECTION ON OPHTHALMOLOGY, COLLEGE OF PHYSICIANS OF PHILADELPHIA.

April 19, 1920.

DR. G. ORAM RING, Chairman.

The Frost-Lang Operation.

DR. HOWARD F. HANSELL, after reciting a brief history of the origin of the operation, described in detail the modification of the method practised in the Jefferson Medical College Hospital.

DISCUSSION. Dr. William M. Sweet believed that the employment of a gold ball in Tenon's capsule offered the most satisfactory substitute for the ordinary operation of enucleation; as it ensures greater movement of the prothesis, provides a shallower orbital floor so that there is less retained secretion, and limits the sinking of the tissues beneath the brow. Before the eyeball is removed the four straight muscles are to be secured to the conjunctiva and underlying capsule, but are not to be tied over the implanted ball, as the latter procedure leads often to displacement of the ball. White silk is to be

preferred for the buried sutures, as black silk sometimes shows thru the thinned conjunctiva to the annoyance of the patient. Satisfactory results are reported by the use of chromacized catgut for the sutures in the capsule. At one time it was not believed important to wait until all hemorrhage had ceased before inserting the gold ball. But two recent instances of ultimate displacement of the ball downward probably from distention of the capsular cavity with blood, permitting the ball to sink downward and remain in this position after absorption of the blood, emphasize the importance of stopping all oozing before the ball is inserted. Dry gauze packing in the bottom of the capsular cavity is the most satisfactory means of stopping hemorrhage.

Dr. Heed suggested the advisability of closing Tenon's capsule by introducing sutures well back (5 mm.) from the free border. In closing the conjunctiva it is essential to suture close to the free margins in order to preserve conjunctival tissue.

Dr. Holloway stated that he had performed this operation many times, and with splendid results. So far he was not aware of any instance, among his cases, in which the ball had been lost. He does not rely upon several sutures in Tenon's capsule, but always uses eight to ten of the interrupted type.

The one annoyance, at times, is the persistent bleeding, and he believed this should be thoroly checked before suturing Tenon's capsule, and when bleeding seemed difficult to check with ordinary gauze packing, he has used gauze and very hot water. When but several sutures are used he believed it quite possible for one or more to tear out should there be marked distention from hemorrhage.

Hess Operation for Ptosis.

DR. WM. ZENTMAYER exhibited a woman, aged twenty-three years, operated upon for congenital ptosis. The drooping was very slight in the right eye, but in the left eye, with the aid of the frontalis, the upper half of the cornea was covered. The greater deformity was the hemifacial furrowing

of the forehead by the contracture of the frontalis. The result of the operation done on left eye only was very good, the fold produced by the operation and the elevation of the lid were exactly symmetric with the natural fold and position of the lid of the other side. The lid could be well closed, the folds in the forehead had disappeared.

DISCUSSION. Dr. Hansell said, for the majority of cases of uncomplicated congenital ptosis the Hess operation is probably the most satisfactory. Dr. Zentmayer's result is most gratifying both as to usefulness of the eye and the absence of all deformity. In a patient at present under observation, congenital ptosis of the left side was complicated with paralysis of the superior and external recti; dislocation of the accessory portion of the lacrimal gland outside the orbital limits and enormous hypertrophy of the lid resembling elephantiasis. The Hess operation permanently elevated to a moderate extent only the nasal third of the lid. Two excisions of the skin and underlying tissues and of the dislocated lacrimal gland have partly improved the appearance and have given partial use of the eye. Further surgical treatment will be postponed until the hypertrophied conjunctiva is reduced.

Discission by Complete Division of the Lens.

DR. S. LEWIS ZIEGLER presented two cases of soft cataract in which he had performed discission by completely dividing the lens, thru and thru, with his knife-needle, after the technic of his V-shaped iridotomy. Under full mydriasis the cornea is punctured above. Two V-shaped converging cuts are then made in the lens from below upward, with a sawing movement in line with the axis of the knife, avoiding all stirring up of the lens cortex or vitreous. Sometimes the nucleus is turned out and occasionally the lens sectors fall forward into the anterior chamber. Rapid swelling of the cortex and prompt solution of the same soon follow. As the capsular sac is freely opened, both anteriorly and posteriorly, the physical pressure of the swollen

cortical can only be exerted forward into the anterior chamber or backward into the vitreous, thus freeing the angle from pressure on the ciliary body and avoiding pain and swelling from this cause. The freedom from postoperative sequelæ is very noticeable. Cocain anesthesia can be relied on if double fixation is made with a horseshoe fixation forceps.

CASE I. W. R. L. developed soft cataract at three years. O. S. operation under cocain, with pupil fully dilated. Complete division on April 4, 1917. Discharged from hospital three days later. No reaction, eye cleared in one month when cataract glasses were prescribed. He is now six years old and reads well. A retest on March 25, 1920, yielded the following result: O. S., S + 9.D = 20/20 pt. Add S + 4.D = J-1.

The father of this child was also shown. He had in like manner developed cataract at three years. Dr. Strawbridge had operated on O. S. about thirty years ago, followed by paracentesis, iris prolapse, iridectomy, posterior synechiæ and later retinal detachment. Some years later Dr. Ziegler operated on the right eye without complication. Refraction was S + 9.D at that time. The eye has gradually shown increasing myopia, until now it registers: O. D., S - 1.D ⊂ C. - 1.25 D. Ax, 90° = 20/20 pt. Add S. + 2.D = J-1. Has useful vision without glasses.

CASE II. R. W., aged eight years. Soft cataract in both eyes; peripheral spicules; fundus hazy. Vision: O. D., 20/100 J-8; O. S., 20/200 J-10.

Operation under cocain and mydriasis, November 19, 1919. O. D.: V. shaped discission freely made. Returned home on fourth day.

November 26. No reaction; cortex swollen; nucleus in anterior chamber.

January 12, 1920. Pupil clearing.

February 20. Ordered cataract glasses.

March 8, 1920. O. S.: Lens divided by converging V thru dilated pupil. Two sections of lens promptly turned out into anterior chamber. Slight reaction on second day relieved by ice

pads. Discharged from hospital in one week.

April 19, 1920. Clear rift in cortex O. S. Some pieces of nucleus in anterior chamber. Test for glasses yields:

O. D.: S + 10.D = 20/30. Add O. D.: S + 4.D = J-1.

O. S.: S + 10.D = 20/50. Add O. S.: S + 4.D = J-10.

The vision of O. S. will improve when the cortex is fully dissolved.

Capsulomuscular Advancement Without Incision.

DR. S. LEWIS ZIEGLER exhibited a case of capsulomuscular advancement of the internal rectus operated on by him on May 15, 1918, with the result of orthophoria, which has been maintained up to the present time. There was marked deviation of O. D., which turned out about 60 degrees and could not be made to converge beyond the median line. So far as the patient knows the condition was congenital.

The operation was a modification of the one presented by Dr. Ziegler before the American Ophthalmological Society in 1914, entitled "A New Operation for Capsulomuscular Advancement Combined with Partial Resection."

Both external recti were first divided and traction made with the tenotomy hook, but this only partly straightened the eyes and the right eye still failed to pass beyond the median line. It was then decided to make an advancement of the right internus, but without incision thru the conjunctiva, somewhat after the suggestion of Trousseau.

Following the technic of his former capsulomuscular advancement but without cutting the conjunctiva or muscle, he grasped the internal rectus of O. D. with the forceps and with a double armed single suture made a whipstitch on each margin of the muscle to fix it. The suture was then brought forward to the sclerocorneal junction, where it was anchored securely. Tying the first turn of a surgical knot, traction was then made to pull the muscle and capsule forward until the tissues crumpled up in the line of the parallel sutures and yielded an overcorrection of about 5°. The

suture was removed on the tenth day. Convalescence was prompt and with the wearing of her proper correction all asthenopic symptoms were soon relieved. The result has been permanent (two years) as to both orthophoria and convergence power of internal rectus O. D.

Dr. Ziegler claimed that this operation possessed all the advantages of his partial resection operation with none of its disadvantages:

1. Firm scleral anchorage.
2. Whipstitch fixation of each muscle margin.
3. Splint-like support of the muscle by parallel lines of suture laid across the superimposed conjunctiva, capsule and muscle, all of which are advanced together.
4. Straight traction on both muscle edges.
5. Graduated control while the suture is being tied.
6. Single suture, removable externally.
7. Tucking or crumpling of the muscle without an unsightly knuckle.
8. Reposition of the globe thru advancement of the capsule.

In view of the simplicity and bloodlessness of this operation, it is to be recommended if one may judge by the brilliant result in the case exhibited. The added power to the sutured muscle may be explained thus: the suture draws the belly of the muscle forward over its insertion so that eventually by absorption of that part of the muscle the muscle is shortened.

Xerosis Epithelialis.

DR. HOLLOWAY, after referring to the various clinical manifestations of xerosis, reported the case history of a colored boy, aged five years, who was first seen at his clinic at the Wills Hospital on April 4, 1920. He had expected to exhibit the patient but an incorrect address was given. No accurate determination of the visual acuity could be made, but in the absence of any pathologic fundus findings, perfectly healthy and clear media and no decided error of refraction, this was assumed to be good.

On each side of the cornea there was a triangular pigmented area with its base at the limbus. Over the greater portion of this area there was a whitish foamlike substance that could be dislodged by the lid margin or applicator. When free from this substance the area was roughened and rather dry. A uniform brownish pigmentation swept around the lower limbus of the cornea, and beginning at the internal canthus there was a well defined streak of delicate brownish pigmentation extending along the fornix of the lower lid to a point well below the cornea. In appearance this suggested, at first glance, an argyrosis, but was doubtless congenital.

Dr. Holloway referred to the observations of Stephenson and Hepburn. In conclusion, he stated that he was confident that our experience with this condition in this country, at least in Philadelphia, was distinctly at variance with that of some of the English observers in regard to its frequency. In Philadelphia it was really a very unusual clinical manifestation.

DISCUSSION. Dr. Zentmayer said: The only case of xerosis of the conjunctiva of this type that he had seen was in the eyes of an infant. The condition was similar to that in Dr. Holloway's case. The child was malnourished in the opinion of Dr. Louis Starr from congenitally deficient pancreatic secretion. Death occurred at the age of about three months.

Unusual Case of Xanthelasma.

DR. J. MILTON GRISCOM exhibited the photograph of a case of xanthelasma of interest because of the extreme size of the growths and the distinct hereditary tendency to this disease in her family. In the right eye the tumors measured 28 x 12 mm. on the upper lid and 20 x 7 mm. on the lower lid. In the left eye the growth on the upper lid measured 25 x 7 mm. and on the lower lid 17 x 6 mm. There were two small nodules at the external canthi of each eye measuring 3 mm. each. The main growths had a nodular, uneven surface and were elevated from 3 to 6 mm.

Complete excision was performed, with excellent cosmetic results.

Dr. Griscom had not been able to find in the literature of the past fifteen years any record of a case so extensive, and he had not found any reported cases of a hereditary character.

Neoplastic Degeneration of Cornea.

DR. BURTON CHANCE presented for diagnosis the case of a woman exhibiting colloid epithelial masses on each cornea. There were two masses on each situated symmetrically midway between the lower limbus and the summit, at about the vertical diameter. These masses were approximately 2 mm. in diameter, and elevated, very much in the manner of herpes, but of a doughy white appearance. They were without inflammatory symptoms, and had occasioned only itching and slight burning sensations. Over a period of three weeks' observation, on alternate days, no changes occurred in the masses or in the surrounding tissues. The eyes were not otherwise affected, but the glandular structures of all four lids were congested and more or less tumid. For many years the patient had suffered from redness of the skin of her face which has in recent years become gradually and steadily less, but which has left her skin rough and the pores prominent. She presents the aspect of one who has recovered from acne rosacea. There had been no stunted or inturned eye lashes observed rubbing against the corneas. From each cornea the somewhat larger of the masses was excised by shaving with a Graefe knife. The underlying corneal membrane was found to be entirely unaffected. The histologic study has not yet been made. Treatment so far has consisted in applications of boroglycerid to the lids of the left eye, which applications have very greatly improved the health of the lids. The left cornea is now entirely clear. As the process gave no special annoyance nothing was applied to the right in order to observe the process of the affection. The patient has been taking sodium hyposulphit, 15 grains, in capsule, three times a day. Dr. Chance does not regard the case to be

one of herpes, but believes it to be an accompaniment of acne rosacea.

DISCUSSION. Dr. Zentmayer said he had never seen a degenerative process as a complication of acne rosacea. He had recently seen in a man, aged fifty-five years, a hyalin degeneration in the cornea starting as small, rounded, elevated, porcelain like spots not more than 1 mm. in size. He thought it probable that Dr. Chance's case was of a similar nature.

Neoplastic Degeneration of Iris.

DR. CHANCE showed the case of a man who reported for the relief of an ulceration of his left cornea, in whose right eye was found a bluish gray mass in the iris filling the angle of A. C. at the nasal side, on the horizontal meridian. The circle of the pupil showed a notch at the site of the mass, and on full mydriasis the mass projected well into the pupil space. There were no signs of inflammatory reaction and there was no pain, the man being unconscious of the presence of the mass. Tension of the globe was not increased. Dr. Chance offered it as a case of melanosis, which is at present benign, yet he is not without the fear that it might become malignant.

DISCUSSION. Dr. Edward A. Shumway said that he thought Dr. Chance's case should be considered one of melanosis of the iris of unusual size. The patient had said, on question, that the spot had not increased in size but that it was a condition that demanded careful watching lest it develop into a malignant growth.

Unusual Type of Atrophy of Choroid.

DR. CHANCE also exhibited a case of extensive atrophy of the choroid in each eye. The left eye presented elliptical vacuolate figures in the stroma, in the bottom of which were the worm-like vessels of the choroid. Considering the extent of the process the fundus was singularly free from pigmentation.

J. MILTON GRISCOM, M.D.,
Clerk.

NEW YORK ACADEMY OF MEDICINE

Section of Ophthalmology

April 15th, 1920

DR. A. E. DAVIS, Chairman

DR. CONRAD BERENS, JR., Secretary

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Injurious Effects on the Eyes of Various Toxemias.

DR. W. H. WILMER, of Washington, D. C., by invitation read a paper on this subject. After an extremely interesting review of the literature of the subject, both earlier and recent, a case was reported in detail; on account of the unusual good health of the patient, the long continuance of the trouble, the negative reaction to the subcutaneous injection, and the final improvement as the result of the therapeutic administration of tuberculin.

J. B. W., 25 years of age, first consulted the writer on February 3, 1920. He gave the following history: Recurrent attacks of iritis in the left eye during 1913 and 1914. In March, 1915, noticed large floating specks in front of the left eye. They gradually became larger until a month later, when that eye became practically blind. An oculist found the vitreous of the left eye filled with blood. A few months after loss of sight of this eye, black specks appeared in the right eye, later taking the form of long floating lines. In August, 1917, a large hemorrhage occurred in the retina of the right eye. This became absorbed after two months' stay in a hospital. The small hemorrhages have continued to occur up to the present time, causing both visual disturbance and great apprehension.

The patient said: "I have been thoroughly examined and the doctors cannot find any cause for the trouble. I am not a bleeder." He was robust and athletic. Tonsils removed two years ago. Sinuses reported clear. Two suspicious teeth have been extracted.

R. Thrombosis of a branch of superior nasal vein, inferior temporal vein, and of a vein in the extreme nasal