A CASE OF NASAL COLOBOMA OF THE CHOROID.

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(*With a colored plate, Tab. iv. of vol. xix., Germ. edition.*)

THE following case is believed to present a unique form of congenital anomaly, and as such to be worthy of being placed upon record.

During May, 1885, Thomas H., unmarried, aged twenty-two, applied for treatment on account of a severe attack of serous iritis in the left eye. *History.*—Father and mother living and healthy; four living sisters, two of whom are in delicate health on account of pulmonary disorders; one brother died at birth, and one sister in early infancy from unknown causes. None of the family have ever had inflamed eyes; the patient had the ordinary exanthemata of childhood, but has never had any severe illness during his lifetime. For a year previous to his present trouble he suffered with neuralgia, chiefly in the distribution of the left supra-orbital nerve. He has also had brachial and intercostal neuralgia, a short laryngeal cough, and is asthmatic. He denies all venereal disease, and has never previously had an inflamed eye. Three years ago he was struck by a shuttle on the left side of the bridge of the nose, but this accident was not attended with any serious local damage to the nose or the eye. For two weeks before the onset of the iritis he suffered with constant orbital and periorbital neuralgia. The vision appeared equal in each eye. The condition at the first visit was as follows:

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R E, V=$\frac{20}{xx}$; Jr.1. 6″– 18″.
L E, V=$\frac{20}{c}$.

R E.—Large, round disc, shallow excavation; retina striated; low H.

L E.—Fine pericorneal injection; cornea hazy, and numerous punctate opacities on Descemet's membrane; iris discolored; no distinct view of the eye-ground; nerve greenish and deeply cupped; veins large and tortuous; the upper central artery lost as it approaches the nerve; lower vessels still more indistinct; at the lower and inner side of the disc a large indistinct whitish area; above, a reddish patch, probably a retinal hemorrhage.

The patient was put upon iodide of potassium and bichloride of mercury, and directed to use atropine drops locally. He came daily for treatment for one week, and then disappeared for four months. At the expiration of this time, during which he had more or less continuously used his remedies, he came again. The eye was now white and quiet, a few floating vitreous opacities were detected, and a clear view of the fundus, presently to be described, obtained. Both eyes were atropinzed, and the refraction error corrected. This proved to be O D, + 0.65 $^{S}\frac{15}{xv}$; O. S, + 0.90 $^{S}\frac{15}{xx}$. These glasses were ordered, and compound tincture of cinchonia and bichloride of mercury given internally. He was not seen again for nearly two years, when he returned on account of chalazia on the upper and lower lids of the left eye. These were dissected out, and the cuts healed satisfactorily. One year later, December 1887, having broken his glasses, he came again; and then the following study was carefully made:

The ophthalmoscope shows in the right eye the optic disc large, round, and outlined by a black and generally sharp-cut pigment line. There is a large shallow dish-like cupping of its surface and a yellowish-red conus downward, perhaps underlying its lower segment. The retina is striated, especially along the larger vessels; and conspicuous glistening striæ are visible between the disc and the macula. The general condition of the eye-ground is good, and the macula normal. There is low H.—Vision is $\frac{20}{xxv}$? raised to $\frac{20}{xx}$? by + 0.65 sph.; and accommodation is D = .25 p.p. 14 cm.

In the left eye the disc is also large, as on the right; but the cupping of its surface is more marked, especially to the lower nasal side, where it shows a decided greenish coloration increasing

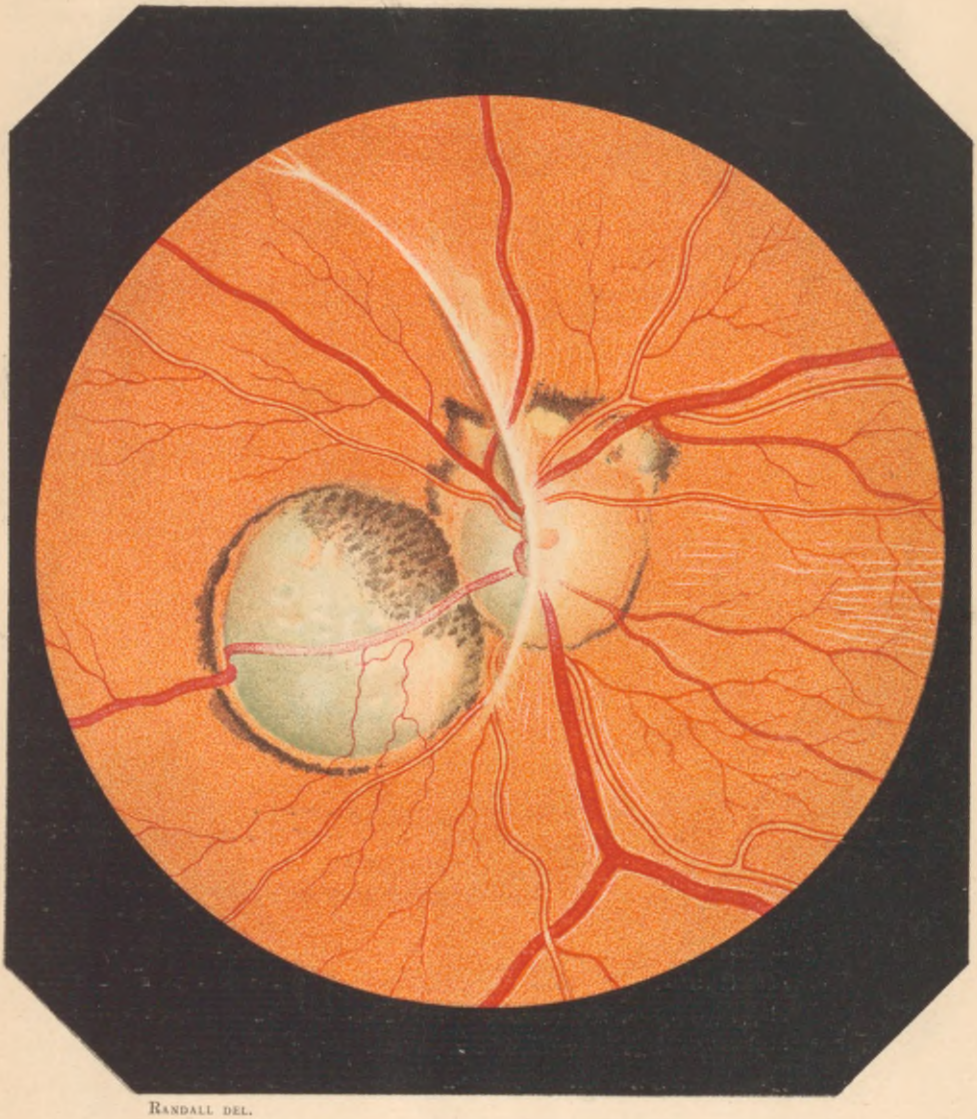
toward the margin. A yellowish conus at the outer side, bounded by a sharp-cut black band extends upward into a rounded patch of choroidal atrophy and pigment heaping just below the upper temporal vein ; and similar disturbance of the choroid embraces the upper margin of the disc. To the nasal side of the nerve and a little below its level is a rounded whitish area tangent to the disc, vaguely marked above and out, and separated from the disc by a band of peculiarly brown pigmented choroid. A large vein, lower nasal, crosses this area nearly in its horizontal diameter, receiving two extremely tortuous vessels in the middle, and bending sharply at its overhanging nasal margin. This area is greenish-white, and opalescent in its central portion, and depressed below the general level of the eye-ground, its deepest portion near the lower nasal edge requiring — 3. D to bring it into clear view. Only the lower and nasal margins are abrupt ; and there a band of yellowish, partly pigmented choroid surrounds it, outlined beyond by a strong black band. The other margins are shelving, especially the upper-outer, where the brown mottling in which the choroid loses itself is extremely peculiar. A falciform outgrowth, greenish and semi-transparent, arises from the emergence of the vessels upon the disc and extends its sharp edge some 3. D forward into the vitreous. It reaches upward and downward, somewhat concentric with the margin of the coloboma, and loses itself at its extremities in fine threads stretching forward into the vitreous, the lower termination being less visible and less prominent than the upper. A small semi-detached vesicle, 3–4 D in front of the eye-ground, floats over the nasal margin of the disc. The remainder of the eye-ground is normal, except for the marked striation of the retina at the posterior pole, as in the other eye. The refraction is low H. ; V = $\frac{20}{xxv}$?? raised to $\frac{20}{xx}$? by + 0.90 sph.; and the accommodation is the same as on the right. There seems an enlarged blind-spot ; but with quantitative perception of light in the region of the coloboma.

It is altogether probable that we have here acquired, as well as congenital lesions ; and it may be assumed that the choroidal disturbance above the disc is of the former character. The falciform membrane, which extends out from the disc as a thin, stretched, and non-vascular membrane, is probably congenital ; and was doubtless present, hiding the vessels, at the first examination. The rounded coloboma,

which presents almost all of the usual features of such anomalies, cannot but be congenital; for it was certainly present within a few days after his inflammatory trouble began, and has undergone no notable change since. Nothing but its unusual position would seem to call at all in question its character as a choroidal coloboma of the ordinary type—an arrest in development and non-closure of the fœtal cleft. It is not unusual to find a small coloboma of the choroid below the disc, inclining slightly to the nasal side, as in the case reported by Mittelstädt, where the iris showed a "pseudo-coloboma" horizontally inward; but no case has been found on record where the choroidal cleft lay, as here, wholly to the nasal side. The problem of its genesis we leave others to solve.

Description of Plate IV.

NASAL COLOBOMA OF THE CHOROID.—Erect image of left eye, showing the rounded greenish-white area to the lower nasal side of the disc and the crescentic falciform membrane projecting into the vitreous. The nasal margin of the coloboma is seen to be overhanging, and hides the vein which turns over its edge; the opposite side is shelving and shows the thin pigmented tissue, which represents the lacking choroid. Pigment disturbance (pathological ?) is seen above the disc and the marked glistening striations along the vessels and at the posterior pole. The general level of the eye-ground was seen with + 1., the deepest part of the coloboma only with — 3. D.



RANDALL DEL.