ATYPICAL CIRCINATE RETINITIS.

DR. FUMIO YANO.

NAGOYA, JAPAN.

The case here reported from the Aichi University, Japan, was one of a boy of 13 without evidence of general disease.

Retinitis circinata, which was first accurately described by Fuchs in 1893, is a rare form of retinitis, of which not a hundred cases have yet been reported. Having observed lately a case which resembles it, I will report it here.

H. K., 13, boy, farmer, came to the ocular clinic in the Aichi hospital, March 22 of this year. Born in a home of nonconsanguineous marriage, he has two brothers in good health. On examining the urine, neither albumin, cylinder casts nor sugar were found. Wassermann negative, von Pirquet's reaction negative. No conjunctivitis, keratitis, iritis or cataract are found. The light sense is reduced a little. However, metamorphopsia, night blindness and day blindness are absent. In testing the color sense, red and green are lost entirely, blue and yellow are also remarkably weak. Ring and central scotomata are present in the visual field.

Taking a radiogram by X-rays, no change is found, especially in the sella turcica. Accessory nasal cavities are normal. There is no sign of change in the organs of internal secretion by Abderhalden's method. On examining the fundus, almost identical and symmetric changes are noted in each eye; namely, the appearance of a circular or oval zone of white exudation, extending from the macular region to the nasal side of the papilla. This consists of numerous large and small brilliant white flecks or lines, particularly in the central region of the macula (fovea centralis). There is a large white plaque and absence of macular reflex ring; but no other changes except these white spots, especially no hemorrhage or edema in the retina. The retinal vessels pass over the circinate deposits. V., R = 0. L = 0.1, not improved with lens.

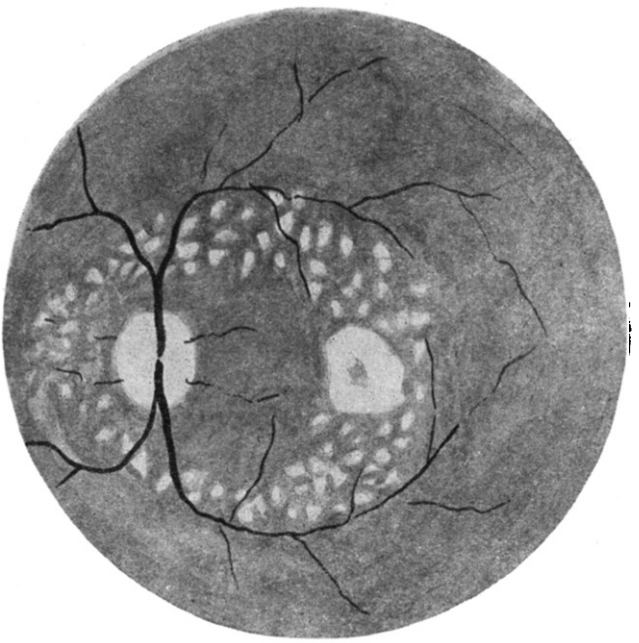

Fig. 2. Circinate retinitis. (Yano's Case.) Fundus of left eye.

Treatment: Internal use of potassium iodid, injection of mercurials, subconjunctival injection of 2% salt solution, and sodium chlorid, for 3 months, have been tried, but without result.

The above case is analogous to retinitis circinata. But circinate retinitis generally attacks old persons. Two-thirds of the cases which have as yet been described, have been in persons of 60 to 70 years. In persons younger than 50, it is seldom seen; but one case was observed in a boy 12 years old. It has been seen more often in women than in men. Retinitis circinata appears mostly in one eye; both eyes are affected in only about a quarter of the cases. In my case it arose in both eyes and was almost symmetric.

Circinate retinitis is especially characterized by the appearance of milk white brilliant flecks on the temporal side of the papilla, around the macular region, and change in the macula itself at the same time. Heinricy and Harms have distinguished two forms, typical and atypical, from the presence or absence of changes in the macula. Leber has said, "a central scotoma is usually present in spite of the absence of change in the macular region, on examining the fundus. Altho an ophthalmoscopic change of the macula is absent, there is a superophthalmoscopic one; and it forms step by step a macular patch and seems to represent slight histologic changes.

Sato has divided it into the following kinds: 1. typical in one eye; 2. atypical in one eye; 3. typical in both eyes; 4. atypical in both eyes. My case bears resemblance to the fourth; but differs from it in the point of extending the white patch to the nasal side of the papilla. In a case of Fuchs the opaqueness in the macular region projects 3-4 D. into the vitreous humor. Nuel, Strzeminski, Doyne and Stephenson observed detachment of the retina. The blood vessels are usually normal, but sometimes varicosed a little and sclerotic or hemorrhagic. Subjective symptoms, disturbance in vision. But it is reduced so slowly that it is unknown certainly when it began.

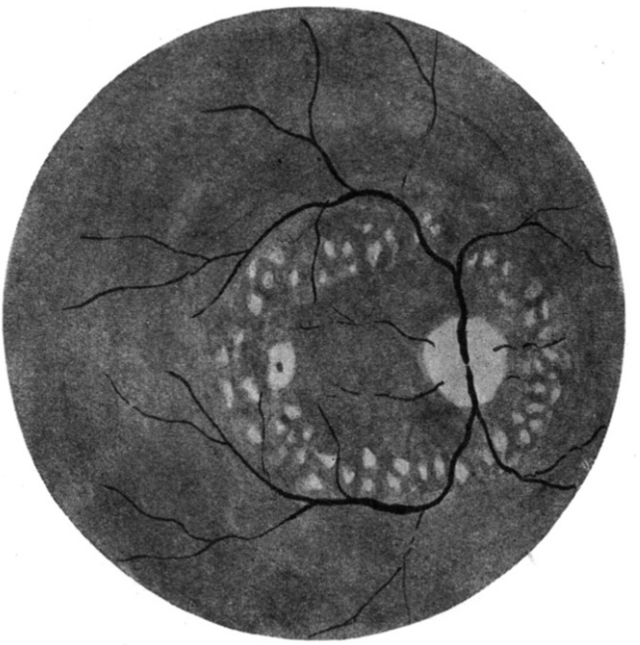

Fig. 2. Circinate retinitis. (Yano's Case.) Fundus of left eye.

The course of retinitis circinata is

eminently chronic and the ophthalmoscopic picture may remain unchanged for years; de Wecker observed no change for 20 years. The etiology of this disease is unknown. Axenfeld, de Wecker and Komoto ascribed it to arterial sclerosis. Some disputants argued that it depended on the histologic change after hemorrhages. But there is no relationship between the proliferation of the white flecks and hemorrhages, as Fuchs and Goldzieher have asserted. Fuchs, Doyne, Stephenson and Haab insist that it is the cholesterin crystal formation that makes the white spots. Syphilis may be an etiologic factor (Goldzieher, Lasker), that is, syphilitic disease in the blood vessels may give rise to it. But there was no syphilis in my case. Fuchs, Lasker, Goldzieher and others proved a trace of albuminuria. Sometimes Bright's disease comes to our knowledge after the retinal change but there is no sign of change in the urinary organs in my case.

BIBLIOGRAPHY.

1. Fuchs, E. Retinitis circinata. v. Graefe's Archiv. f. Ophth. Bd. XXXIX. s. 227.
2. Goldzieher. Die hutchinsonsche Veränderung des Augenhintergrundes. Archiv. f. Augenheilk. Bd. XXXIV. s. 112.
3. de Wecker. Faut-il différencier la rétinite circinée ou degenerescence blanche, de la rétinite apoplectiforme? (Zit. nach Nagel's Jahresbericht.) 1891.
4. Axenfeld. Diskussionsbemerkung. Ber. über die 25 Vers. der ophth. Ges.
5. Ammann. Ein Fall von Retinitis circinata. Archiv. f. Augenheilk. Bd. XXXV. s. 123.
6. Friedenberg, P. A Case of Retinitis Circinata. Amer. Ophth. Soc. Tr. XXXIII. p. 181. p. 181.
7. Goldzieher. Über einen Fall von Endarteritis obliterans Ret. und Retinitis punctata. Zentrlbl. f. Augenheilk. Bd. XIII. s. 364.
8. Doyne and Stephenson. Retinitis Circinata. Ophth. Soc. Tr. XXIV. p. 61.
9. Heinricy und Harms. Klin. Beiträge zur Degeneratio circinata Retinae mit besonderer. Berücksichtigung der atypischen Formen des Krankheitsbild. Arch. f. Ophth. Bd. LXXXVI s. 514.
10. Ischreyt. Ein Fall von Degeneratio circinata Retinae. Klin. Monatsbl. f. Augenheilk. Bd. LII. s. 687.
11. Steinbugler. A Case of Retinitis Circinata. Arch. of Ophth. Vol. 47, p. 513.
12. Komoto. Retinitis circinata. Nippon Gankagakkwai Zasshi. Bd. III. s. 196.
13. Sato. Supplement of Clinic Picture of Atypical Circinate Retinitis. Nippon Gankagakkwai Zasshi. Vol. XXI. s. 565.
14. Fujita. A Case of Retinitis Circinata. Chuogankaiho. Vol. 9, p. 805.