

RETINITIS PUNCTATA ALBESCENS WITH PIGMENTATION*

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THE following case of retinitis punctata albescens is reported because of several rather unusual features.

Case Report

A man aged 19 entered the army in 1954 with no history of eye disease and a visual acuity of 6/6 in each eye. He was posted to Egypt in April, 1954, and soon after arriving began to notice difficulty in seeing at night. This became gradually worse over the next year and



FIG. 1.—Left fundus showing diffuse white spots with areas of pigmentation near periphery.

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in July, 1955, he reported sick. By this time he had begun to notice that his central vision was affected.

Examination.—There were changes typical of retinitis punctata albescens in each eye with pigmentation of bone-corpuscle type at the periphery of both fundi (Fig. 1). Visual acuity in the right eye was 6/12 (6/9 with glasses) and in the left 6/9 (6/6 with glasses). The visual fields were markedly contracted (Fig. 2). No other abnormality was found on physical examination. The white areas appeared to lie superficially in the retina. Although none was in front of any of the retinal vessels a well-marked parallax could be obtained between the white spots and the choroidal vessels. The retinal vessels were not reduced in calibre.

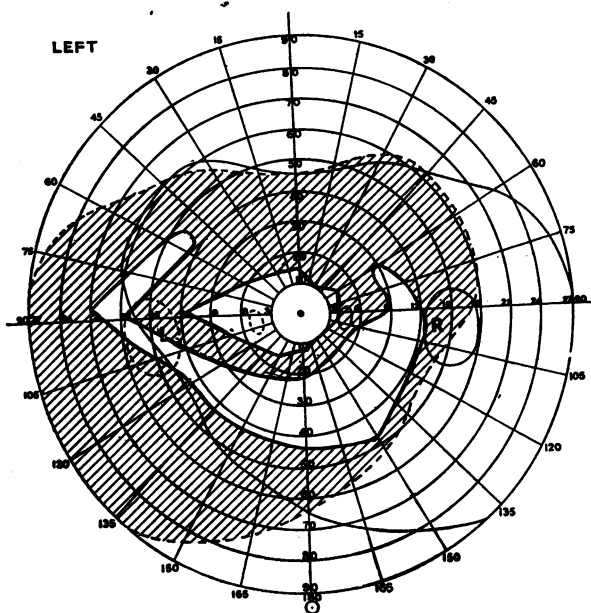


FIG. 2.—Left visual field (28 July, 1955) showing generalized constriction and a ring scotoma which has become congruent with the peripheral scotoma above. V=6/9; $\frac{1}{2}^{\circ}$ white.

There was no consanguinity or relevant family history. The patient was intelligent and until his vision was affected was employed as a clerk, playing cricket and football in his spare time.

Discussion

This case is interesting in that there were no symptoms until the patient was 18 years old, and there was no family history of retinal disease.

Lauber (1910) divides retinitis punctata albescens into two groups. The first he calls fundus albipunctus cum hemeralopia congenita. These are congenital non-progressive cases, night-blindness being the only symptom and scattered white spots the only sign. The term hemeralopia is therefore unfortunate. The second group comprises cases which are also congenital but which are progressive in character and associated with fine pigmentary changes, atrophic choroidal lesions,

narrowing of the retinal vessels, and optic atrophy of the type seen in retinitis pigmentosa.

The cases described by Nettleship (1887, 1888) and Milner (1932) also illustrate the congenital nature of the lesions and the familial association with retinitis pigmentosa. Elwyn (1954), in summarizing the literature, considers that the white dots first appear in early childhood and are associated with night-blindness which dates from the same period.

On the other hand Henderson (1934) describes a case which developed in a girl aged 17 two weeks after an attack of Vincent's angina; in this case there was pigmentation as well as white spots.

Conclusions

The nature of the white spots is obscure. Their apparently invariable association with night-blindness strongly suggests that they are in the nervous pathway from the rods. Henderson (1934) observed areas of pigmentation replacing the white spots; this would seem to indicate that the disease process which starts in the nervous layers of the retina has spread so that eventually the external limiting membrane is involved as in retinitis pigmentosa (Wolff, 1951). This would explain Lauber's second group of cases. Thus it is unlikely that the white spots are colloid bodies (Leber, 1915, 1916) or areas of sclera shining through an atrophic (Mooren, 1882).

It seems that the condition is primarily a degeneration of the retinal elements. This may be congenital or acquired. In those cases where it is progressive it tends to involve the pigment layer of the retina as well as the nervous layers.

Summary

A case of retinitis punctata albescens with pigmentation is described. The case is unusual in that the patient was symptom-free till late adolescence. The literature is reviewed briefly and the nature of the white spots is discussed.

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