BILATERAL SYMMETRICAL SECTORAL RETINAL PIGMENTATION*†

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THIS condition has been given various names from time to time. Mauthner (1868) and Jaeger (1869) described an appearance, now generally known as grouped pigmentation of the retina, as a peculiar form of retinitis pigmentosa but their cases were progressive. Küper (1960) described five cases of sectoral pigmentary degeneration in one family, and Hommer (1959) three cases in one family. Lisch (1955) recorded further hereditary cases in two families. Sporadic cases have been reported by Bietti (1937), Verrey (1947), Tavalara (1949), Rubino (1949), and Graham (1963).

Case Report

A man aged 51 years attended for refraction, when it was discovered on routine fundus examination that he had bilateral pigmentation of the retina confined to the lower segment and a small strip at the periphery. Colour vision with Ishihara tables was normal in both eyes. He was an intelligent man and in good health; a complete medical and neurological examination showed nothing abnormal, and the family history showed nothing significant.

Examination: The visual acuity in the right eye was 6/24, and 6/5 with -1.25 D cyl., axis 90° ; and in the left eye 6/24, and 6/5 with $+0.5$ D sph., -1.25 D cyl., axis 80° .

The anterior segments of both eyes revealed no abnormality except arcus senilis. There were no lenticular opacities. The tensions were normal. The fundus examination of both eyes showed clear media, normal optic discs, normal maculae, and clear foveal reflexes. The lower half of the fundus had a tessellated reflex and showed a very characteristic, well-defined bone-corpuse type of pigmentation, mostly situated deep to the retinal vessels, starting from a horizontal line below the macula and extending up to the periphery. The appearance resembled primary pigmentary degeneration of the retina, as far as the type of pigmentation was concerned, but the distribution of the pigment was different. The blood vessels showed no alteration in calibre. Some continued with the same calibre into the pigmented areas, but others stopped short of them.

The artery/vein ratio was normal (Fig. 1, opposite).

Perimetry.—There was complete loss of the upper visual field extending to a horizontal line above the macula; there was also a loss of a strip of the peripheral visual field, corresponding to the fundus lesions detected on ophthalmoscopy (Fig. 2, opposite).

Comment

This condition is distinguished from primary pigmentary degeneration of the retina by the fact that it is limited to the lower retinal quadrants and a strip at the periphery and is non-progressive with good visual acuity; the retinal blood vessels show no change, and the field defects correspond to the lesions in the fundus.

Summary

A case is presented of bilateral symmetrical inferior sectoral and peripheral retinal pigmentation.

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FIG. 1.—Fundus photographs, showing inferior sectoral retinal pigmentation.

FIG. 2.—Sectoral field defects demonstrated by central perimetry.

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