SCLERAL PLAQUES*

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THOSE scleral plaques which I have previously reported (Graves, 1937, 1939, 1941) were in the nasal area of the sclera, with the exception that in one case which I had seen there was a faint suggestion of plaques in the temporal area also. As far as I am aware, Dr. P. H. Boshoff of Johannesburg was the first to report defined lateral (temporal) plaques. His communication (1942) was of particular interest because he reported inferior plaques in addition. Both temporal and inferior plaques would seem to be rare compared with nasal plaques (Culler, 1939). By way of completing my previous records I now submit details, with comparative measurements, of a case of pronounced plaques in both the nasal and the temporal areas of each eye.

Case Report

C. Y., a lady aged 84, who came to see me in 1944, was the first patient that I had seen with very noticeable plaques in both the nasal and the temporal areas. I made notes, meaning to publish them after the war, but these were mislaid and came to light only recently in some stored luggage.

FIG. 1.—Position and relative sizes of plaques in right sclera.

FIG. 2.—Position of plaques in left sclera.

The two accompanying diagrams (Fig. 1, right eye, and Fig. 2, left eye) have now been compiled from these notes. I submit these particulars mainly because they give measurements in keeping with my previous reports, but I regret that these measurements cannot here be stated in terms of millimetres, because in 1944 I was using a micrometer ocular which I have not used since and which has become mislaid in the interval. As the notes record the measurements only in terms of the units composing this ocular scale, and as at present I have no ready means of checking how many units in this ocular represented a millimetre, I can here only quote measurements in terms of these units (I have an impression from memory, however, that about 9 units represented one millimetre).

* Received for publication August 15, 1950.

In the two accompanying figures, HH represents a horizontal line through the centre of each cornea. The right temporal, the right nasal, the left temporal, and the left nasal plaques are represented by RT, RN, LT, LN, respectively.

In Fig. 1 (right eye) TX represents the nearest part of the limbus (temporal) and the line A represents its distance from the edge of RT. Similarly NX is the nearest part of the limbus (nasal) to the edge of RN, B being the distance between.

In Fig. 2 (left eye) the distances C and D have a corresponding significance.

In each of these figures, while the distance to the nearest part of the limbus (NX and TX) is proportionately indicated, the distance between the plaques themselves is much compressed by the omission of the equivalent of the diameter of the cornea.

Observations.—All four plaques were very dark and noticeable. Looked at by naked-eye observation, the middle of the right nasal plaque was at, or very slightly below, the mid-horizontal line HH; the middle of the left nasal plaque was a little below this line.

The horizontal measurement of RT at its widest part was 18 units, and the vertical 25 units. The horizontal measurement of RN was 38 and the vertical 50 units. Similarly, LN was horizontally 25 and vertically 48, and LT was horizontally 25 and vertically 30.

The distances A and C were 45 and 41 respectively; and B and D were 31 and 26 respectively.

In the right eye the retinoscopy under homatropine was as noted in Fig. 1 (with peripheral lens changes as indicated). The unaided vision of the right eye under homatropine was 6/18. With + 0.5 sph. and + 1.0 cyl., 25 to 30, the vision was 6/12 (the patient was deaf and testing was not easy). The line ZZ in Fig. 1, which represents a line drawn through the centre of the cornea, just touches the upper edge of each plaque. There were opaque nerve fibres above the right optic disk.

The left eye had mature cataract.

It will be noticed that in each eye the nasal plaque was nearer to the limbus, longer, and situated higher than was the temporal plaque. The vertical relationship of the plaques to the mid-horizontal line (HH) was proportionately as drawn here in relation to their size. But to save space in these diagrams the horizontal distance of the plaques from each other is compressed by approximately the amount of the diameter of the cornea, as is indicated by the relationship of NX and TX (the limbus) in each diagram.

REFERENCES

- BOSHOF, P. H. (1942). *Arch. Ophthalm., Chicago*, **28**, 503.
 CULLER, A. M. (1939). *British Journal of Ophthalmology*, **23**, 44.
 GRAVES, B. (1937). *Ibid.*, **21**, 534.
 — (1939). *Ibid.*, **23**, 191.
 — (1941). *Ibid.*, **25**, 35.