Fixation problems in fundus photography

S. S. HAYREH* AND T. J. FFYTCH

Institute of Ophthalmology, University of London

All those who use the West German Zeiss fundus camera (Fig. 1) for routine fundus photography or fluorescence fundus angiography may be confronted with the following problems while using the conventional fixation target outside the camera:

(i) The conventional external target is of no use for subjects with a single functioning eye, with the other eye either excised or blind or with no fixation.

(ii) It may not be possible to photograph areas temporal to the optic disc in patients who converge on looking at the target at near distance.

(iii) It is not possible with the conventional external target to photograph areas temporal to the macular region without good co-operation from an intelligent patient. This is because the movement of the external target is obstructed by the tube of the camera.

(iv) It is difficult for patients with markedly constricted tubular fields or defective dark adaptation to follow the movements of the external target.

With these problems in mind, we have used the fixation target provided inside the camera (Figs 1 and 2), which has proved extremely helpful in these difficult cases. The patients have found it very convenient to focus on the target and follow it. It has been possible to photograph, not only the macular area, but also the regions around it extending nasal to the optic disc and temporal to the macular area, as well as above and below the macular...
region. Most of the posterior pole can be covered by this means, and it is also possible to assess the point of fixation in patients with macular lesions (Fig. 3).

**FIG. 2** *Fluorescence fundus angiogram, showing the internal fixation target (arrow)*

**FIG. 3** *Fundus photograph, showing eccentric fixation in a patient with extensive pigmentary degeneration and loss of macular fixation in both eyes*

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S S Hayreh and T J Ffytche

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