and I am indebted to him for this and for his participation in the rough and tumble of the investigation.

REFERENCES

PHOTOGRAPHS OF RETINAL DETACHMENT IN APHAKIA BEFORE AND AFTER OPERATION

BY
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MRS. B. G., age 61 years, first came under my care May 9, 1939, because of progressive diminution of vision. The patient had a mild grade of diabetes associated with rather marked hypertension.
FIG. 1.
Retinal detachment before operation.
Fig. 3.
Fundus after operation.
Cataract extraction was performed on the right eye, August 28, 1939. The left lens was extracted May 22, 1940. The cataracts were of the nuclear variety. The post operative and subsequent course was noteworthy in no particular manner until 5 months after the second extraction, for on October 24, 1940, the patient developed a large detachment of the retina involving the upper nasal field of the left eye.

A hole whose size was approximately one half disc in diameter was seen in the detached retinal periphery along the 5 - 11 o'clock axis. A crescentic shaped operculum was visible in the inferior portion of the hole with its convexity toward the optic nerve. After several unsuccessful attempts at fundus photography a picture illustrating the retinal detachment was secured. Visual field studies showed a field involvement corresponding to the area of retinal detachment. The retinal detachment was operated on, November 4, 1940. Several electrodes were inserted in the region of the hole. Again the post operative course was not remarkable. The patient

![Figure 4](http://bjo.bmj.com/)

**Fig. 4.**
was discharged from the hospital three weeks after operation. Approximately six weeks after operation a post operative fundus photograph was secured. This is shown in the second illustration in which the peculiar "S" blood vessel may serve as a guide in orientation. The vision in this eye with correction has remained 20/25—and was so recorded when last seen, May 19, 1943. The fundus view does not show the areas of choroiditis which the multiple electro-coagulation punctures produce since these lesions are located a little more peripherally. A study of the post operative visual field is also included in this case report.

STUDIES IN DARK ADAPTATION AS A MEANS OF DETECTING DEFICIENCY OF VITAMIN "A"*

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The implication of a dietary factor in the production of a pathological state is determined by the use of certain "diagnostic criteria" (Yudkin, 1944a):

1. The demonstration of the existence of a deficiency of the dietary factor in subjects with the specified condition.

2. The production of the condition by a deficiency of the dietary factor.

3. The cure of the condition by replacement of the deficient dietary factor.

The use of studies of dark adaptation as a means of assessing nutritional status in respect to vitamin A is based on these criteria. It has been shown that:

1. Impaired dark adaptation is frequently found in groups whose diet is deficient in vitamin A (Jeans and Zentmire, 1936), (Harris and Abbasy, 1939), (Steven and Wald, 1941), (Hunt, 1941).

2. Experimental deprivation of the vitamin often results in a deterioration in dark adaptation (Booher et alia, 1939), (Hecht and Mandelbaum, 1939, 1940), (Wald and Steven, 1939), (Wagner, 1940), (Wald et alia, 1942).

3. The administration of vitamin A to individuals with poor

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