

Functional Degeneration of the Central Fibers of the Optic Nerve  
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If there is one function of the visual apparatus that is of the greatest importance to the individual, it is that of central vision. Without it we lose the ability to read or carry on a gainful occupation. Early diagnosis of reduced function of the central fibers of the optic nerves should be constantly in mind.

Yet, many eye specialists fail to diagnose the Disease until it is well advanced. Instances are not rare of neglected cases, ending in practical blindness. Fortunately, in many of these cases, only one eye is affected. Our experience shows women are more susceptible than men.

We see case after case of incipient cataract. Much has been learned about the handling of these cases, so that the percentage of those now afflicted who eventually would need an operation as been radically reduced. But granting the incipient cataract has been cared for, or the ripe cataract removed, of what value is a patient's vision who has a central scotoma (central blind spot)?

Why is it that many of these cases go into the advanced stages before a diagnosis is made? Largely, I believe, because its symptom is so common—blurring, constant or periodic. In fact, in many cases the patient has no specific complaint. Patients have many times presented themselves for a routine examination only, expecting to need only their glasses changed. Unless there is a minute care during the examination, the condition may be overlooked, and serious results occur. Many of these patients demonstrate vision of 20/20 minus; a scotoma for the 1 m/m disc of red, green, or blue may be found, depending upon the cause.

Once this condition is found, its cause must be located as early as possible. First and foremost of possible causes are abscessed teeth. Even barring positive color field findings, demonstrating an oral infection, an Xray of the mouth is indicated. Probably second in importance as a cause is retinal arterio-sclerosis. Having eliminated these two conditions, any toxemia may be the cause; in my practice I have found two cases of low grade biliary infection. In the absence of any cause (idiopathic), Vitamin A should be used.

In these patients, function of the central fibers of the optic nerve must be kept at its peak. As soon as a cause has been found, and remedial steps started, syntonics should be employed. Syntonic Rx 1. ( $\alpha$  filter flashing seen through a pinhole the other eye occluded) is the agent most efficacious.

I shall cite three cases from my files-

Women patient 42 years of age, first seen in 1931, vision corrected each eye 20/20 plus. Color fields negative.

Examinations made each year following with the same results. Five years later, 1936, vision correct R.E. 20/20 minus. Color fields negative. Physical examination negative, Syntonics Rx 2 was used. (Three times weekly 10 minutes of  $\mu \theta$  and 5 minutes of Rx No. 1 see above for left eye only.)

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This patient is seen twice a year; no other physical dysfunctions have at any time been found either by a physician or in my examination. So it has been found necessary to repeat Syntonics, approximately every year and a half. Vitamin A seems to be of some help.

As an interesting fact, possibly showing a family tendency, in 1945, the son while in the Army, developed blurred vision, varying in intensity, for which the Army eye specialists could find no cause. In Jan. 1946 we examined his eyes, and demonstrated a central scotoma in the left eye. Vision was 20/30. He failed to keep appointments, so that it was sometime in May before we saw him again. Vision was now 20/65. Color and form fields were contracted and the fundus vessels showed a circulatory disturbance. Referred to his physician, a high NPR was found. To date vision has improved to 20/40. The physical examination demonstrated severe kidney involvement.

### Case 2.

A woman patient for 10 years. Vision has been normal during this time. In 1945 she was 52 years of age. She presented herself for her 6 months routine examination. The examination showed reduced function of the central fibers of the optic nerve as referred to, and upon questioning she said she had on occasion noticed a blurred spot over her reading, the size of a quarter. The fundus was normal; vision was R. E. 20/20 minus; one millimeter disc for blue was unrecognizable, green was recognized in the first test as green, on the second test as white; color fields demonstrated a slightly contracted green field. She was referred for oral radiography and two abscessed teeth were extracted. Syntonics were started immediately. Two months ago, vision was again normal with no return for the blurred spot.

### Case 3.

A woman age 50 demonstrated a typical case, unilateral. She was referred to her physician with a telephoned report of findings. He referred the case to a colleague, no attention was paid to my report and nothing remedial was done. The patient has been totally blind in the one eye for 5 years. She is however, still my patient and feels she was badly used.

### Case 4.

Young man 21, signed up at his home in Texas during 1943, with one of the aircraft manufactures, to work in Southern California. On the train enroute here, he woke up with the feeling that something was wrong with his eyes. On covering one eye he found he could see objects very vaguely. On presenting himself at the aircraft factory he was advised to have his eyes examined.

Our examination demonstrated a unilateral central scotoma; color fields normal; refraction negative; in fact all findings were negative, except with the ophthalmoscope a hole was seen in the macula of that eye. He was referred for a physical examination, results being all negative. On advising him of conditions, he returned home.

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