RETINAL ARTERIO-SCLEROSIS BY Russell E. Simpson, O.D., F.C.S.O.

Stiieglitz states, "the major diseases whose incidence reflects the effects of aging include cardiovascular diseases, the arthropathies, diabetes mellitus, gout, cancer, and the disorders of the climacterium. Of these the cardiovascular group is by far the most significant, more than 50% of deaths in later years result directly from this group. Unfortunately, there has been over-emphasis of detail in classification of various "specific" disorders which come under the generic term cardiovascular disease. As a result, hemorrhage is frequently considered a separate and distinct entity. "Unquote".

Just as 50% of deaths occur in later years as quoted, I believe it is safe to say 75% of all cases of blindness and partial blindness occur because of retinal arterio-sclerosis and its effect on central vision. As man's span of life is being lengthened this percentage is increasing. Please bear in mind, that, while cataracts, either in the incipient stages or later, reduce vision, it can be arrested, eliminated by treatment or surgery, so that it per se cannot be classed as a condition causing blindness.

Certain structures of the body have a distinct inclination towards arterio-sclerosis. The coronary, renal and cerebral vessels in particular, of which we must class the retinal as belonging to the latter. This then makes the disease one of vital importance to the eye specialist. The early diagnosis of the disease must receive far greater attention than it has in the past, now that man's life span is being lengthened, otherwise man will live longer, but visually incapacitated.

The classical picture of retinal arterio-sclerosis, has been, in order of incidence; pallid arteries, later assuming silver wire appearance, indented veins, later showing ampuliform enlargements, corkscrew arteries and veins, edema of the disc and hemorrhages. This picture should be amended, that earlier diagnosis can be made.

For eighteen years, I have been spending considerable time in clinical research on these cases, hoping to find methods by which earlier diagnosis could be made, that vision would thereby be retained. Three years ago the Visual Geriatric Society made it their number one research, and I am happy to report to you remarkable results.

The first patient whom I shall call case 1, who started me on these researches, was a very charming woman of 38 years. She had had four examinations made by four different eye specialists, both medical and non-medical, each prescribing different prescriptions for glasses. She complained her vision, corrected was 20/20 each eye, the medias were clear and the fundus normal, the color fields were normal, sinus, throat and teeth were normal. Please remember this was eighteen years ago.

Why at the time, I did what I did, I do not know, but I decided to test her vision under reduced illumination for distance, using the Ives Visual Chart. I found vision 20/20 minus one letter in each eye. That was a clue. I would call your attention, here, to the fact, that, I consider normal vision under this test to be 20/20 plus. I then used a 1 m/m pin hole disc and vision was further reduced to 20/20 minus three letters in each eye. At that time, I was not familiar with the use of vitamins. Had I been, I would have tried vitamin A, with the belief I had a simple case of night blindness.

The problem was what to do. Fortunately, the patient was a woman with adequate finances, and was willing to do anything I suggested. I instituted syntonics, (prescription No. 1), followed by the basic Rx of the 1 m/m pin hole, five minutes each eye. Improvement was show, treatments being given three times a week. After three month, vision corrected with the pin hole was 20/20 minus one each eye. She had reported no blurring for some week. Syntonics was stopped with the advice to return in three months. For several years, during periodical examinations it was necessary to repeat the Syntonics. Later, Vitamin A was suggested, and some help seemed to be obtained. At least, the time between Syntonizations was lengthened.

Several other patients were handled the same way with partial success. Some had physical abnormalities and were referred to their physicians. Always I am hoping to get some help from other practitioners of health.

One woman, 52 years of age complained of a blur over her reading, of the size of a half dollar. Removal of an abscessed tooth eliminated this, although she showed the reduced vision with the pin hole, but her color fields demonstrated the dental condition.

I am reporting to you, in particular, only cases that can be classed as retinal arterio-sclerosis, affecting the central fibers of the optic nerve, with an absence of proven physical abnormalities.

Another patient, 52 years of age, showed R.E. vision corrected 20/20 pin hole 20/20, L.E. 20/40, pin hole 20/60. She was referred for physical examination and got in the hands of a medical ass, who knew more about the case than I did, although I had telephoned him about the patient. Making only a cursory examination, he referred her to a medical colleague for an eye examination. He found nothing to be alarmed about, as reported to me 1 year later, when the patient returned. In the meantime, the patient had become totally blind in the left eye.

Three years ago, I had a patient with a classical picture of early retinal arterio-sclerosis, and the patient had reduced vision with the pin hole, 20/30 minus each eye. I noted something new. At the point where one artery branched, I thought I detected a yellowish whitish dot, which looked like calcium. It was a transient thing, in other words I thought I saw it and then I did not. For the appearance of this dot, I refer you to the report of the case of hyper-parathyroidism I made in 1934, and reported in the American Journal of Optometry. Here now was a case, with reduced vision, recognizable as retinal arterio-sclerosis. Maybe I had found something.

For years I had made it, a rule, when referring cases of retinal hemorrhage to their physicians for treatment, to ask him, in the absence of a cause to treat, to give the patient what we know as ½ of formula R2, hoping to hurry absorption. Most agreed, although questioning its efficacy. In the previous case, although there were no hemorrhages I requested the same thing. The treatment was instituted and one month later vision had improved to 20/20 minus, and has remained so, with slight variations since.

I now had two means of combating what I had come to recognize as deterioration of the central fibers of the optic nerve, and which was undoubtedly the incidence of retinal arterio-sclerosis.

I arranged to have patient number 1, in for re-examination, instituting treatment with what the Visual Geriatric Society calls Formula R2.

Vision since that was instituted and followed, has been, and is, 20/20 each eye. With and without the pin hole, 18 years later.

Two years ago, a woman patient 40 years of age, demonstrated vision 20/20 each eye. With the pin hole 20/30 each eye. Again, in this case, I thought I detected the illusive calcium, dot. Formula R2 was used, and as long as treatment is continued, she demonstrates pin hole vision of 20/20 minus one in each eye. If treatment is stopped vision fails to 20/30 again.

CONCLUSION:

Vision is the most valuable gift God has given us. When a patient places his vision in our care, we should be prepared to assume the full responsibility for it. And, it is a responsibility, not for today, but as our group motto is, the Prolongation of Vision, for the patient's life; that may be a rich one.

Reduced central vision in the absence of demonstrable diseases of the body must I believe, now be recognized as arterio-sclerosis. That it is of paramount importance that the earliest diagnosis shall be made and remedial measures be instituted.

That eye specialists have the greatest responsibility in this respect, because, by the diagnostic mean placed at our disposal, it is possible for us to recognize the disease, long before other practitioners have the opportunity.

Our group has thirty cases, similar to these reported and more are being added. Formula R2 will be made public as enough cases are handled for us to feel justified in certifying to its worth.

This research report, demonstrates the value of continuous effort, coordinated group effort, and if it urges you, who, have listened, to greater efforts to the Prolongation of Vision, I am well paid.

Syntonic prescription:

Rx No. 1 Mu Theta 10 minutes; Alpha flashing 5 minutes; Monocular, 1 m/m pin hole. Add to above Iodine by mouth = Formula R2