SOME OBSERVATIONS ON THE REDUCTION OF HIGH MYOPIA VIA VISUAL TRAINING By W. I. Davis, O.D. F.C.S.O.

First and foremost the patient must want stronger eyes and weaker glasses. They must want it whole-heartedly enough to work for it. In the case of a diabetic patient the doctor can guide, but the patient must check for sugar in the urine and use insulin as indicated, and he must watch his diet every meal as in all diabetic cases. Likewise, myopic patients must do most of the work – That is, the millrun patient who can get most of DB6 (Keystone's Visual Skills) and where the anisometropia is within one diopter of each other in both eyes, and of course, has no pathology. As for the doctor, he must remember that the human body is the most adaptable thing in the world, our feet tend to become adapted to the shape of the shoes worn; likewise eyes tend to adapt themselves to the glasses we wear – especially in our formative years. However, our eyes seem to adapt themselves fairly well to the lenses we wear, and as all Syntonists know some types adapt faster than others; the slowest being the Syntonic Osseous type (Wide wrists).

There is one thing I want to mention which I believe is original. I have never heard it mentioned nor have I ever read anything about it. I have had a barometer in my refracting room for years, and have observed that myopes never make as good a showing on V.A. with low barometric pressures as they do during high readings. I'd like for others to watch and report this phenomenon.

I shall now give you a case of a myopic physicist. In 1923, he was working for a company which had a ruling that no one could continue to work for them with 20/50 N.V.A. This man was a minus 2.25 Myope (conservatively speaking). When I had raised his N.V.A. to the place he asked for, I discharged him, but he came back the next week to consult me. "Say, Doc, I want to ask you a question – what power lens focuses parallel light at 16"?" I answered, "Plus 2.50." He asked, "At 16 inches the average eyes triangulate about 2.5 meter angles"? Answer, "Yes." "then if I had a pair of plus 2.50 dioptic lenses and could read at 16 inches with them, I'd have 20/20 vision"? I answered "Yes, you should, but to make sure you should work it off a little further." "Well." He said, "I want two pairs of plus 2.50 glasses." I did not see this patient again until about 1930 when he had 20/20+ vision. I haven't seen him since, but in 1942 he called me – "Say, Doc. Can I pass the eye tests that the Douglas Aircraft Company gives – if so, I can get a good job out there." I answered him, "Well. George, I'll have to let you answer that one. Can you read at 18" with your plus 2.50"? George replied, "Yes, I can." Then I told him he was as good as in the Douglas plant. A few months later his daughter was in for a refraction and advised me her Daddy was working at Douglas.

Don't give a myope Visual training if he has anywhere equality and can pass DB6. If you start it, he will take the attitude – "Well, doctor, you cure me and I'll pay the bill." You get very little results unless they happen to be a physicist such as this patient.

When the war came on, I had to drop all Visual Training I possibly could. I lay awake nights figuring out what I could do in cases where they were not too badly off. There were two types of eyes that I do not

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give office Visual Training to anymore. First is the myope whose anisometropia is within one diopter or so in the two eyes, and the hyperopic with low # 16 B. Dr. Peckham was also interested in it, but also in presbyopia. Jacques Peckham and myself had worried about low # 16 B for fifteen or twenty years. Dr. Peckham and I almost had the answer the last time he was in Tulsa. I followed through and got it, but not before he passed on.

Here in a few words is how it is done:

No matter what type of case it is, prescribe their full # 21 at their closest reading distance in single vision reading glasses; the more they read the faster # 16 B raises. Dr. Peckham did it another way. It is the hardest way, I think. He stressed and re-stressed – add plus .25 D.S.O.U to #14 and re-take #16 and #17 B and keep it up so long as # 17 B raises or improves. The point at which # 17 breaks down or lowers indicates the Rx they need whether the can use it now or not. I've used it hundreds of times, but it is much quicker to take #21 at 12, 14 or 16 inches, depending on length of their arms, etc., work as close as possible and they won't get sleepy as they do in reading through # 1 Rx.

There were so many who had to have Visual Training to get into the service or defense work, I lay awake nights thinking how they could do their own Visual Training. The late Dr. Ray Morse Peckham had given hints when he came to Tulsa and we went into eye reconditioning with office training.

Here is how it works:

Prescribe only 20/50 or 20/40 or 20/30 distance acuity – barely enough minus to enable them to do their work – then prescribe their #21 at their closest working distance as a reading addition in an Ultex a Seg type lens. They are to look at distance through upper part and read through lower part and <u>KEEP ALL</u> close work pushed off to the threshold of a blur. Check each month and re-explain – <u>KEEP IT PUSHED OFF</u>. Soon they will have 20/20 vision through the upper part: then do it all over again if they want to reduce the myopia still more; if not, tell them their eyes are now settled and see them every two or three years, depending on age, etc. If they are on a job where they are under tension and speed is required, don't expect much progress. If you don't have the ability to explain to the patient within his bracket of understanding, and if you don't have the patience to re-explain every two to four weeks, until they have improved enough so they know their eyes are improving, don't bother. Tell them to remember what they can see without any glasses. Then ask: "Would you be willing to work hard if you could see the next line and the next"? Tell them you can coach them, but they will have to do the work.

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