

VISUAL FIELDS

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Duncan, Okla.

By

Hugh F. Webb, Opt. D.

With the Technical Assistance of T. A. Brombach, OPT. D.

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Among the more dramatic and startling things in the practice of an Optometrist is the correction of strabismus. Most men who have had much success in this line say that cures are much more easily effected while patients are young, and if the care is given soon after the onset of the squint. This is only logical, but the important part is finding of the squint early, even before the two visual axes remain separated from a common point of fixation.

More recent concepts concerning strabismus are leaning farther and farther from the imbalanced muscle theory, and are pulling nearer and nearer the idea that squint is created to avoid an undesirable situation in the association of neurological patterns of focus and triangulation. Relief comes from these troubles when one eye is turned out of the visual act and the association is no longer maintained. Squint then, in the main, is a concession in the visual act because an in harmony exists in brain centers. (Volume 3, Number 1, lists four concessions, ie; (1) retreat from visual task, (2) altered motor responses, (3) inhibited motor impulses, and (4) inhibited sensory impulses.

Very seldom in the process of attempting one of these concessions to eliminate trouble does an organism try one and one only. More frequently several, or all of them, are tried until one is found that produces the results desired, i.e., the elimination of existing interference. Many cases spend an entire lifetime in and out of one and then another, and not really accepting any type of concession. Due to this a false security has been entertained when a child "gets over" his cross eyes. Perhaps he is over his cross eyes but he may be getting into another concession equally as destructive to visual efficiency. The only way one can be sure he is over it safely is to have an analysis made of all visual skills with special attention paid to the other three types of concession.

Very frequently an amblyopia will accompany, or alternate with squint in young children prior to the age of puberty. This type of amblyopia is of a temporary nature rather than permanent, and comes under the class of transitory visual aphasia. When squint is perpetrated after a short time at reading it is almost always accompanied by enlarged blind spots, only to disappear, both squint and blind spots, after outdoor activity at games, etc. The squint is not always obvious and so must be measured objectively. Blind spots will show exaggerated changes under this condition. Correction will depend upon the dictates of all findings of the visual analysis. It may be through lenses, visual training, posture correction during reading, improved lighting, changes in home environment, etc., or a combination of them.

The case of an eleven year old boy beautifully illustrates this point of squint and amblyopia combined. This boy is the fifth child in the family and seven years separates him from the youngest of the other four who were all within two years separation in ages. Two girls of late

teenage monopolized the family attentions and most of the house. Paul, as we will call him, had interests widely separated from other members of the household, and frequently retreated to his own room to pursue them. He was very much interested in his school work and spent much time with his books and hobbies and collections dear to a boy's heart. The teachers had no complaint against his work. His manner was rather retiring, and instead of being a trouble to other people he shrank from them.

Physical health history was negative to any outstanding incidents. He had survived measles and scarlet fever before school age.

Paul's mother received quite a shock one evening as he emerged from studying with his eyes crossed. Upon questioning she found he was unaware of it. The shock was equally as great when he appeared without the crossing two hours later. By the time the crossing had occurred for the third time

Paul was rushed to the Optometrist for help. He was kept out of school to make the visit.

In the process of analytical procedure nothing was found to blame for the crossed eyes. Hyperopic reserves were present, ductions were adequate, amplitudes of focus and triangulation were very high, and the Betts "Ready to Read" battery showed no deficiencies except a tendency toward suppression.

A recommendation was given to carefully watch his reading posture and to have adequate indirect lights for study, and to return in sixty days for observation. In the meantime crosseyedness was noticed only once, but it had been observed that reading material had been brought to within eight inch distances after a half hour reading. When brought to the office he was given books to read for thirty minutes, and blind spots were recorded as in Figure 1. Also a slight left convergent squint was measured on the perimeter arc at about 8 degrees. This was hardly noticeable from a casual observation of his eyes. At this time base-in and base-out ductions at near point were low on the recovery.

A reading prescription of convex sphere was given him, and also an ortho-stereo-scope with the supplementary set of cards for home training, including cheirosopic tracing, fusion and depth work.

Instructions were given to maintain reading posture of sitting up straight with material no nearer the eyes than would be permitted by keeping elbows bent at a right angle and with head up. Also instructions were given to seek cooperation with school teachers in maintaining the same thing, and in not over-burdening Paul with an excessive reading load.

The ortho-stereoscope set was completed in six weeks. A return to the office at that time showed elimination of the syndrome that has shown trouble before. Blind spots were normal, and no evidence of squint was manifest, nor had there been any recurrence since the second office visit. Findings at this time were taken after Paul had been doing color work and tracing for twenty five minutes.

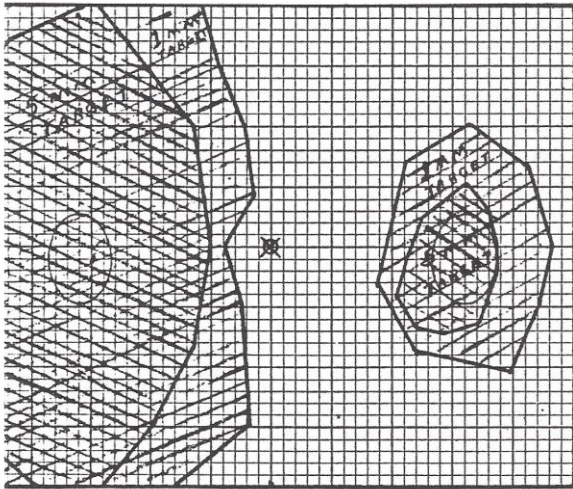


Figure #1

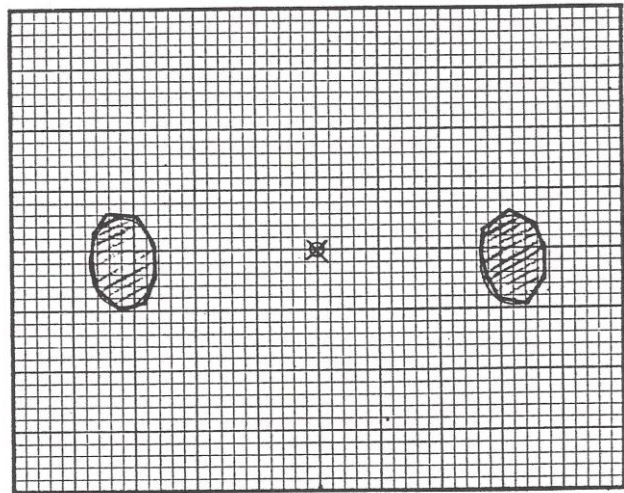


Figure #2