

CASE REPORT

Successful Vision Training for An Esotrope

by Ronald Molzan*

History:

H. P., female, age 5, was first seen for a routine visual examination in May 1979. The chief complaint, as reported by the parents, was that the right eye wandered in occasionally. She had never been examined previously, and there was no family history of amblyopia or strabismus.

Clinical Findings:

The unaided acuities at this time were OD 6/9 OS 6/9 OU 6/6 (Allen slide). There was an intermittent comitant right esotropia of 6° at 6m and 10° at 40 cm. With the Worth dot, there was fusion at all distances in the lighted room, but in the dark, there was a diplopia response with occasional suppression of the right eye (fluctuation between 5 and 3 dots). The rest of the examination was unremarkable, and no treatment was instituted at this time.

At the six month checkup in October, the mother reported that the right eye was staying turned in more frequently. The clinical findings now revealed constant suppression of the right eye, light and dark, at all distances.

Disposition:

With the kind assistance of Dr. Dalziel, a combination spectacle therapy and visual training program was prepared. Before therapy could be instituted, the parents requested a second opinion from an ophthalmologist. Dr. Bernstein in Windsor concurred with my diagnosis and recommended a spectacle prescription to control the eye turn.

The initial spectacle prescription was

OD +1.00 2°OUT

22 + 1.50 add
OU round top

OS +1.00 2°OUT

The prism was necessary to establish a minimal amount of fusion.

To supplement the spectacle therapy, the patient was given home training with the MSC kit to be done three times daily for ten minutes. The individual targets for tracing were used to eliminate the right eye suppression. All the other targets, which are the same for each eye, were used to build up the negative fusional reserves. The parents were shown how to use the MSC kit and were advised to vary the targets at each session with the training goals in mind.

The initial MSC fusional ranges, before training, with the glasses, were 50° convergence and 10° divergence. In January, after one month of training, the fusional range had improved to 15° divergence. The patient reported a fused response for the Worth dot at all distances in light and dark.

In March, after two more months of training, the fusional ranges were 50° convergence and 25° divergence. A new spectacle prescription was ordered as follows:

OD +1.00

+ 1.50 add OU

OS +1.00

The prism was removed to facilitate further expansion of the fusional ranges.

In June 1980, a full examination was carried out and the findings were as follows:

OD 6/6

acuity

Snellen

OS 6/6

the ocular deviation was now a phoria of 4° at 6m and 10° at 40cm. There was no suppression, and the stereoacuity was 80" of arc. The base in fusional reserves were X/8/2 6m

10/15/4 40cm

The patient was discharged with a maintenance home training program to further increase the fusional reserves.

Discussion:

Before taking on this case, my opinion of visual training was, "I'm busy enough. Who has time for it?" What began as a personal favour to the parents became a highly rewarding experience. Almost immediately after training began, the parents noticed a dramatic improvement in their daughter's colouring. She could stay inside the lines on the pictures. Soon afterward, her schoolwork improved from C's to straight A's. Her teacher was quite pleasantly surprised.

We have the training and ability, why not use it? The rewards are tremendous without a huge sacrifice of time.

*O.D. - 75 Erie St., Leamington, Ont. N3H 3B2

The MSC kit was used both as a cheiroscope and as a divergence exerciser.

Footnote

* MSC stands for Mirror-Stereoscope-Cheiroscope. With its winged arms and double mirrors, it can be set up as a cheiroscope for anti-suppression training or as a fusion trainer to build up fusional reserves. It is available for \$23.95 US from:

Bernell Corporation
422 E. Monroe St.
South Bend, Indiana
46601
Phone: 219-234-3200

CLASSIFIED

WANTED: Used 3 arm unit to house slit lamp, phoropter and keratometer. Any make - model considered.

Reply to Box A CJO

For Sale

**Ethical practice in medical building; 15 years established; Asking: \$90,000
Inquiries invited.**

**Dr. John R. Dumka
2031-33 Avenue S.W.
Calgary, Alberta, T2T 1Z5
Tel: 242-1818**