

# CASE REPORT

## Diagnosis of a Microtropia

by  
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Microtropia is defined as a small angle strabismus, (about  $5\Delta$ ) which characteristically shows eccentric fixation and anomalous correspondence.<sup>2</sup> Cohen states that this condition is difficult to detect with the cover test as the angle of eccentric fixation often equals the angle of anomaly. Thus the patient exhibits a lowered acuity (usually 20/40) in one eye without a readily apparent sensory motor etiology.

### History and Findings

Patient C.M. age 32, complained of difficulty seeing clearly up close and in the distance. She was aware that she had astigmatism; but, did not wear her Rx. as it was out of style. Family history revealed that her eight year old daughter was strabismic, however, the trait was not present in her husband nor per parents.

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Refractive examination showed a consistent reduction of acuity in the left eye at 6M and 40cm.

O.D. +0.50 - 1.25 x 012

V.A. 20/15

O.S. +0.50 - 0.75 x 170

V.A. 20/30-2

The use of a 3mm pinhole again showed lowered acuity in the left eye.

O.D. 20/20

O.S. 20/40

Internal examination and biomicroscopy showed no signs of pathology in either eye. I.O.P. and central fields were normal O.U.

The unilateral cover test had shown a fused response at distance and at near. A repetition of the test gave the same results. Von Graefe ductions suggested normal binocular vision; however, some fading of the target viewed by the left eye was reported.

6M exo

BI. x/12/6

B.O. x/12/6

40 cm 5 exo

B.I. 12/12/6

16/18/12

A second examination was made in which further binocular testing was carried out.

Stereo acuity (Titmus Fly) was

found to be low (200 sec.) Using the grid pattern of a Welch Allyn ophthalmoscope, the monocular fixation of the left eye was found to be unsteady and slightly nasal. Fixation was centered and steady in the right eye.

The nasal eccentric fixation of the left eye was confirmed using the Hadinger Brush Target of the M.I.T. Tester (Bernell Corp.). The After Image Transfer Test described in Long, revealed anomalous correspondence of an amount equal to the angle of eccentric fixation. The diagnosis of microtropia was made.

The visual direction of the retinal receptors of the deviating eye has shifted in order that the point of eccentric fixation of the deviating eye corresponds to the fovea of the non deviating eye. (preferred eye). This anomalous correspondence is deep and would be difficult to break down. Thus orthoptic therapy is not advised for cases of microtropia.<sup>1</sup>

### References

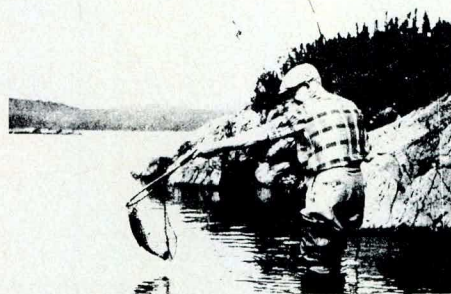
1. Cohen, A.H. Amblyopia Lecture presented at the American Academy Meeting, December 1978, Boston Mass.
2. Long, W.S. Manual of Strabismus and Orthoptics, ed. 2, 1977. University of Waterloo, Waterloo, Ontario.

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