

There was a marked A pattern of movement, with esotropia in elevation, exotropia in depression, hypertropia of each eye in abduction. Synoptophore angles, obtained subjectively and checked objectively, were

with right eye in primary position: $+5^{\circ}$

with left eye in primary position: $+5^{\circ}$ R/L 3

with much alternating suppression. Fusion was doubtful, not surprisingly in view of the great variation in vertical and horizontal angles for different directions of gaze.

Nevertheless, when JF was asked to demonstrate the exercises which Miss Kirby had taught her, she turned her head a little to the right, tilted it left a fraction, and followed a pencil with steady binocular fixation from 33 cm to about 10 cm, maintaining physiological diplopia all the while.

The Hess Chart (Fig.4) agrees with the observed pattern of ocular movements and is similar to Case 2, but without the gross asymmetry.

Comment

These cases serve to show that alternating sursumduction is no bar to binocular single vision. The potential for good or useful binocular single vision is far better retained in ASD cases than in any others of birth onset and complex muscle anomalies.

Unless one is forewarned, it would be easy to misdiagnose such cases. As regards objective signs, a marked intermittent convergent squint, apparently purposive to reduce nystagmus or vertical deviation, often suggests a constant convergent squint on early visits; and the alternating vertical movement might wrongly be interpreted as bilateral or unilateral inferior oblique overaction (This does not imply that constant convergent squint and/or inferior oblique overaction are never associated with ASD) Subjectively, difficulty in superimposing targets, due to alternating vertical deviation, may be misinterpreted as loss of correspondence.

These problems may be solved by caution in long-term management, and by particular techniques of investigation using careful direction of the patient in fixation with one eye or the other or both.

In addition, bizarre behaviour occurs from time to time, such as vergence movements in pursuit of SMP slides, or changes in vertical deviations on Hess charts after monocular instillation of atropine. These (who knows) may be clues by which, when carefully collected and collated, the aetiology of ASD may ultimately be unravelled.

Acknowledgment

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REFERENCE:

Lang, J., *First International Congress of Ophthalmology*, 231

CASE HISTORY : HEADACHES

J. Fitzsimmons

Presented in Sydney, April 1975.

Michael A, aged 12 years, first attended the Outpatients Department of the Sydney Eye Hospital complaining of blurred vision in his left eye, and of headaches after school. On referral to the Orthoptic Clinic he was found to have a convergence insufficiency; one month later, on his third visit, he was discharged as symptom free.

Michael returned twelve months later, again complaining of headaches. His convergence was fair, his accommodation somewhat below normal. A refraction showed that no glasses were necessary. Treatment was again attempted. Michael's convergence and accommodation improved steadily. His responses to all orthoptic tests were soon satisfactory, but his headaches persisted without improvement, and were now always in the morning.

Michael was referred back to the Outpatients Department, where the ophthalmologist found

visual acuity 6/5, 6/9 (no improvement with pinhole)

pallor of the left disc

headaches always present in the morning, growing worse during the day,

youthful appearance for a 14-year-old,

left temporal hemianopia.

A pituitary tumor was suspected. This was confirmed by skull X-rays, and Michael was referred to the neurologist.

This case was a reminder that if a patient complains of headaches, one should note when and where they occur, and bear in mind that although there may be evidence of convergence insufficiency, it is not necessarily the only cause. Particularly, vision should be tested to 6/5; any deterioration, no matter how slight, may indicate a neurological or ophthalmological problem.

CASE HISTORY : INDUCED HYPO ACCOMMODATIVE SQUINT

Maree Sullivan

Presented in Sydney, April 1975.

Miss H.P. aged 25 years, was referred for an orthoptic examination, complaining of blurred vision for near work during the past 6 weeks. She had found that her mother's glasses (+3.00 D. sphere R and L) enabled her to see print clearly and to read quite comfortably. Her history revealed that she was schizophrenic, and had been prescribed two drugs, Cogentin (a depressant with a cycloplegic agent) and Melleril (a tranquiliser).

Clinical examination revealed a small left convergent squint for near, and approximate orthophoria for distance. Both binocular and monocular accommodation were grossly defective and at her convergence near point (6 cms.) there was no constriction of the pupils. The Maddox rod reading was esophoria 4^Δ, while the Maddox wing showed esophoria 15^Δ. Miss H.P. could bar read N48 with an effort.

A week later, having suspended the Cogentin on her doctor's advice, this patient presented with a small esophoria for near and distance. Her accommodation was no longer defective, and there was normal constriction of the pupils on convergence. She could bar read N5 easily without the use of her mother's glasses, and was symptom free.

It was interesting to find that a squint could be induced in this way. If there had not been an underlying esophoria, would the result have been the same?

I would like to thank Dr. David Benjamin for allowing me to present this case history.