INTRODUCTION

To describe clinical characteristics, symptoms, and health-related quality of life in adults with DVD or DHD. Measurements appear to contradict Hering's law of equal innervation, differing according to which eye is fixing. DVD and DHD are considered markers of infantile onset strabismus.1-4

METHODS

Patients

• Retrospective review of adult strabismus practice over 16 months (March 2013 to June 2014) to identify adults with dissociated ocular deviations.

• Patients with paretic and restrictive strabismus were excluded.

• Patients completed questionnaires to assess the quality of life in adults with strabismus (AS-20)6,7

• 40% Co-existing Horizontal Exotropia (ET)7

• 6% Infants ET

• 9% Infantile XT

• 29% Childhood ET

• 26% Childhood XT

AS-20 Subscales

• Self-Perception

• Interactions

• Reading Function

• General Function

AS-20 Subscale Normal Threshold

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<th>AS-20 Subscale</th>
<th>Normal Threshold</th>
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<td>Self Perception</td>
<td>85.18</td>
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<td>Interactions</td>
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<td>Reading Function</td>
<td>85.34</td>
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AS-20 Questionnaire

• 5 Likert-type response options: “never,” “rarely,” “sometimes,” “often,” and “always.”

• 16 items in 4 domains (Rasch analyzed).

• Each domain scored 0 to 100 (worst to best HRQOL).

RESULTS

Clinical Assessment

• The prism under cover test (PECT)8 was used to detect and measure DVD and DHD.

• We standardized the PUCT by specifying the duration of occlusion.

• Right eye is occluded for 10 seconds and then the occluder is switched to the left eye.

• Observe the refixation of the right eye.

• Repeat a series of 10-second occlusions with prisms added behind the occluder until the deviation is neutralized.

• Repeat for left eye.

• DVD was defined as difference in deviation between occluding right and occluding left of >5 pd.

• DHD was defined as difference in deviation between occluding right and occluding left of <5 pd.

Analysis

• Descriptive statistics calculated as frequencies, with 95% confidence intervals.

• Subnormal AS-20 scores defined as a score below the 5th percentile for visually normal adults (Rasch-converted scores).

• Rasch-scaled thresholds (0-100) for normal were derived from a previous cohort of normal, non-strabismic adults.

• Most patients with DVD/DHD had symptoms of eyestrain and some experienced diplopia.

AS-20 Scores: Proportion Worse Than Normal

Clinical Characteristics of 35 patients identified

• Symptoms of eyestrain

• Reduced HRQOL

• Diplopia

• Symptoms of eyestrain and diplopia may be under-recognized in adults with DVD or DHD

CONCLUSIONS

• Patients with dissociated ocular deviation (DVD or DHD) frequently have:

  • Symptoms of eyestrain

  • Reduced HRQOL

  • Diplopia

  • Symptoms of eyestrain and diplopia may be under-recognized in adults with DVD or DHD

  • In the light of these findings, treatment should be considered for adults with symptomatic DVD or DHD

REFERENCES


Sneh S. Dhannawat, David A. Leske, and Jonathan M. Holmes

Department of Ophthalmology, Mayo Clinic, Rochester, Minnesota

DISCLOSURE

None (All Authors)