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Visual complaints, visual disorders and rehabilitation in patients with multiple sclerosis

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Introduction and objective

Vision problems are common among patients with multiple sclerosis (pwMS), but the visual complaints pwMS may experience are often not discussed at the doctor’s office. Therefore, pwMS often are not referred to the rehabilitation care they need, while quality of life drops further. Our objective is to understand visual complaints of pwMS better by exploring the prevalence of visual complaints and underlying disorders. Our goal is to optimize rehabilitation for these patients.

Visual complaints not discussed?

1. Patients report difficulties expressing their visual complaints.
2. Vision problems are described as for example dizziness or a headache, or generally as blurry.
3. Other issues need to be discussed.

Visual disorders often persist in pwMS.
Ask for visual complaints directly.

Visual functioning

- Smooth Pursuit
- Saccades
- Contrast sensitivity
- Colour vision
- Binocular vision
- Nystagmus
- Visual Field
- Visual Acuity

Referred patients often had abnormal smooth pursuit and saccades. Contrast sensitivity and colour vision were affected in 24% to 25% of patients. Thirteen to 19% of the referred patients had abnormal binocular vision, showed nystagmus or had changes in their visual field. None of the patients had an abnormal visual acuity (≥0,3, 0.12 LogMAR).

Methods

500 pwMS completed the Screening of Visual Complaints questionnaire. For 19 complaints, patients indicated whether they experienced the complaint often/always, sometimes or hardly/never. PwMS with visual complaints (n = 53) were referred to Royal Dutch Visio, where the visual and visuoperceptual functioning was assessed. Frequencies of complaints and abnormal functions are presented. Occupational therapy was offered to all patients.

Visual perception

- Visual motor speed and visual search
- Object recognition
- Non-lateralized attention and grouping
- Figure ground segmentation
- Visuospacial working memory
- Visual shape recognition
- Motion perception
- Visual cognition load
- Visualconstructive abilities
- Lateralized attention and spatial cognition

Visuospatial functioning was less often affected, but abnormal scores (percentile <0,5) were found on all visuospatial abilities that were assessed in the referred patients. Visual motor speed and visual search were most often affected.

Take home message

- Patients with MS report a wide range of visual complaints, but do not reach rehabilitation care. Since visual acuity is spared in most patients with visual complaints, this should not be a criterium for referral.
- Ask for visual complaints directly.
- Visual disorders often persist in pwMS. However, occupational therapy can help overcome difficulties in daily life due to any kind of visual complaint.

Rehabilitation

Occupational therapy helps patients to overcome all kinds of difficulties in daily life, by providing insights and advice, training or special tools and aids.

Table: Patients report difficulties in a wide range of activities in daily life, such as driving, reading, cooking, hold a conversation, using a computer, tablet or phone and grocery shopping. Patients report that activities are more difficult to do, take more effort, or are not doable anymore at all.

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