Correspondence

Depth perception in strabismus

Sir, Recently Henson and Williams published an article entitled ‘Depth perception in strabismus.’ Regrettably, the authors did not review the literature completely. If they had, they would have noted that Cooper and Warshowsky4 scientifically evaluated monocular cues in the Titmus stereo test, and that Cooper and Feldman3 looked at the availability of monocular cues in random dot stereograms. In those studies they found that monocular cues are used by patients when a line stereogram is made up of symmetrical shapes decentered in a small area, i.e., Titmus circle test, and that monocular cues are rarely used by subjects viewing random dot stereograms. Cooper and Feldman also found, as Henson and Williams reported, that small-angle strabismics have real stereopsis on line stereograms, while large-angle strabismics do not.4 This is not surprising in light of the fact that fusion is not needed for stereopsis, and that stereopsis has been reported with up to 14° of disparity in normals.

Contrary to Henson and Williams, we have not found any constant strabismics who appreciate random dot stereograms.3 This is consistent with Fender’s and Julesz’s findings in normals that fusion is needed for appreciation of a random dot stereogram. Another way of saying the same thing is that the deviation must be smaller than Panum’s area for appreciation of a random dot stereogram. The difference between our findings and Henson and Williams’s may be explained if some or all of their subjects were intermittent strabismics. Three of the 7 subjects who had good stereopsis were defined as nonamblyopic, small-angle, constant exotropes. This is an extremely rare situation— one which we have never seen. In addition the exotropes who demonstrated ‘good’ stereopsis had a mean angle of deviation, 3.3Δ with best optical correction and no real amblyopia. This is such a small angle of deviation that it is possible that all these patients were actually intermittent. (No cover testing was reported by Henson and Williams during actual testing of stereopsis.) It is our clinical and research experience that any patient with 20 seconds of stereoaucy must be bifoveal and cannot have a constant strabismus. Thus we suspect that most of the Henson and Williams subjects were intermittent strabismics, not constant strabismics, as they reported.

In conclusion, we have found that small-angle strabismics have reduced stereoaucy on lined stereograms and no stereopsis on random dot stereograms. Large-angle strabismics possess no stereopsis on either line or random dot stereograms.

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References
very distinct subgroup, for they differ from cases of congenital nystagmus with compensatory head shaking. In the first place the wave form of congenital nystagmus usually consists of much lower frequency oscillations interrupted by saccade-like movements. In addition the compensatory type of head shaking in congenital nystagmus accompanies a modification of the nystagmus rather than a total suppression. Perhaps the most distinctive difference symptomatically is that visual acuity in congenital nystagmus is relatively preserved and enhanced during head shaking. In contrast, visual acuity in our patients with high frequency oscillatory nystagmus was markedly impaired.

Alternatively, as we believed of the patient we reported, all 3 children may be examples of spasmus nutans. If this is so and the classical descriptions of spasmus nutans are comprehensive, then they should eventually resolve. Unfortunately we have been unable to follow up this possibility, so we cannot firmly make a diagnosis of spasmus nutans (as it is commonly understood) in these 3 patients. Nevertheless, for the reason that we have found a distinct pattern of head/eye co-ordination in these 3 patients we suggest that they do constitute a distinct nosological entity.

Three distinct patterns of head and eye co-ordination in children who suffer congenital nystagmus or the onset of nystagmus from an early age are now recognised. There is a head tremor with nystagmus in which the head movements are involuntary and in no way assist vision. There are children with compensatory head movements and nystagmus in whom the head shaking modifies the nystagmus so that vision is improved. The third type is the one we have tentatively termed spasmus nutans in which head shaking abolishes the nystagmus. These 3 would seem to cover the logical possibilities of the combinations of head and eye movements and as such provide a basis for objective classification of nystagmus and nodding. We would welcome reports on the long-term progress of such patients so that this classification, according to objective criteria, may eventually be used as a guide for prognosis.

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References

Correction
Sir, Since the publication of our article describing 3 patients with corneal ulceration due to Branhamella catarrhalis, we have become aware of a previously reported case. Professorial Unit, Moorfields Eye Hospital, City Road, London EC1V 2PD.

References

Book reviews


The regularity with which Colour Vision Deficiencies appears is as baffling to the reader as it must be gratifying to the distinguished editor. Is it possible that the subject should be making such vast strides as to merit a tome every year?

If one really reads the book then one notes by way of answer that the title is misleading. Some of the contributions do not mention the subject (cf. Creutzfeldt, Stell, etc.). Others (e.g. Cobb and Shaw) write about its non-existence. Some papers are highly informative even if they deal with colour vision rather than its defects. However, the level of the papers is so unequal that one is bound to feel sorry for the wheat that is mixed up with the chaff. This report of the symposium held in Teddington in June 1979 illustrates that, if one has paid one’s registration fee, one can attend the meeting, but fails to prove that all contributions have to appear in print. Just because the printed page cannot scream is no reason to make it suffer. And a 2-page index to a 400-page book is of arguable value.

ROBERT WEALE


This book is clearly written and easy to read. It has an American style of expression aimed at an American readership, but is well set out in appropriate chapters to show the newly one-eyed patient how to overcome many problems. There are a few unimportant inaccuracies in description of clinical conditions and diagrams, but these do not detract from the general usefulness of the book. It is also useful reading for the ophthalmologist, as it sets out many aspects of the advice to be given to such patients, which may not have been so clearly appreciated before.

M. J. ROPER-HALL


This second edition of volume III is an extremely well illustrated atlas of external disorders of the cornea and sclera. Text covers them well and comprises a compact account of each disorder, often followed by the author’s case reports illustrating the disorder together with their photographic representations in monochrome. The descriptions are concisely and clearly written, thus giving the reader readily assimilated details. The photography depicting each disorder is excellent, and most readers will learn a