Editorial: Evidence-based orthoptic practice

DAVID NEWSHAM PhD MSc DBO

The 2015 volume of the Journal contains a good variety of articles comprising review and original research papers. It is encouraging that the ratio of review to original articles is at an appropriate level, balancing the opportunity for graduate publication and reviews of important/interesting material but with the greater emphasis on original research studies. There are a number of articles addressing the issue of vision screening. These provide valuable evidence concerning the composition of the battery of orthoptic examination that should be performed. This obviously has implications for the number of children who can be tested in a session and may make services more efficient. Efficiency is also determined by the optimum age at which screening should be performed and whether it is necessary for conditions other than acuity deficits to be examined. This will have manpower implications and the studies in this volume contribute to the evidence supporting the important role of orthoptic-led visual screening programmes.

Orthoptists are in a strong position to contribute to and shape the evidence base for both the diagnosis and management of visual function and ocular motility disorders, as there are still many areas of practice that require scientific evaluation. One such area is the assessment of the density of suppression and risk of intractable diplopia following amblyopia treatment. The importance of this assessment is something that is consistently taught to students in the UK, yet its evaluation is based on anecdote and clinical judgement. The lack of advice and common practice resulting from a lack of research is evident in the Royal College of Ophthalmologists’ Guidelines for the Management of Strabismus in Childhood (2012), which states that the Sbisa/BF bar can be used to assess the density of suppression, but not how the results should be interpreted. Other countries such as the United States seem much more relaxed regarding assessing the risk of diplopia, e.g. in the Pediatric Eye Disease Investigator Group Studies, which is surprising given the potential for litigation. This risk appears to be present though, as a survey of UK orthoptists indicated an estimated incidence of 4 cases per year following amblyopia treatment. One of the difficulties in evaluating the incidence and risk of intractable diplopia is determining whether the risk is very small or alternatively whether cases are only reported rarely due to the cautious practice of orthoptists in their management. Patients receiving treatment at a later age is fortunately much rarer now than it used to be due to the effectiveness of orthoptic screening programmes. Age may again become more of an issue in the near future, however, due to the increasing plasticity of the visual system that has been reported and the possibility that treatment for adults may become more mainstream.

One of the problems in assessing the risk of intractable diplopia is the limited options for measuring the density of suppression in a normal clinical environment. This is confused further by the presence of two different red filter bars in current clinical use with different strengths of filter. Evidence assessing the reliability of the Sbisa bar is essential in order to determine whether this is a valid measure of suppression density, and a paper by Crawford and Griffiths in this volume adds to the knowledge in this area. There appears to be some value in the use of the Sbisa bar as a means of assessing risk, but its sensitivity to changes in the density of suppression is not clear due to the relatively large steps between each filter and intra-subject variability. A new method to assess the density is currently under development by the Editor which it is hoped will provide an additional tool to measure this important aspect, enabling the prospective assessment of the risk of diplopia in amblyopia treatment.

References