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EDITORIAL

Science-based vision therapy

Terapia visual basada en la evidencia científica

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Vision therapy, also known as vision training, is a term used to define highly specific, sequential, sensory-motor-perceptual stimulation paradigms and regimens that are used to improve vision skills, such as eye movement control and eye coordination.[1] This training procedure can be performed in both home and office settings, but always under the professional supervision of an optometrist or an orthoptist. As vision therapy is a non-invasive procedure and there have been during years no consistent criteria for its prescription, a great variety of exercises or treatment regimens with no scientific basis and a doubtful control over the condition treated have been developed. This has led to a negative perception of vision therapy in the medical community, with a rejection of this procedure of improving visual performance by health care professionals, including many eye care practitioners (ECP). However, there is a scientific basis for vision therapy[1] and there are a lot of well-conducted studies, including controlled clinical trials,[2–4] providing a scientific support to the work performed by many ECP everyday worldwide.

The information obtained in previously well-conducted studies as well as in future ones should be used as the basis for current vision therapy, developing a new science-based vision therapy, away from the negative concept of vision training. There are experimental studies showing the physiological effects of specific exercises of vision therapy[5] and it has been shown even how the cortical activity is increased after the performance of repetitive vergence training.[6] Therefore, it can be said that vision therapy is science-based procedure. As in any other area of visual sciences, more research is needed to improve the procedures, to find new indications and to strengthen the reputation of this optometric field.

The current issue of Journal of Optometry is dedicated to binocular vision, including new advances in the characterization and treatment of binocular disorders, and even case reports suggesting new indications of vision therapy that must be confirmed in future consistent studies. This issue is an additional contribution to the exciting field of binocular vision and consequently to the field of vision therapy. It is an additional piece for the building-up of the puzzle of science-based vision therapy.

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