## **Book Review**

Visual and Vestibular Consequences of Acquired Brain Injury, Edited by Erwin B. Suchoff, O.D., DOS, Kenneth Tiuffreda, O.D., Ph., and Neera Kapoor, O.D., M.S., Optometric Extension Program Foundation, Inc., 2001, \$35.00, ISBN: 0-943599-42-3 (Paperback).

I looked forward to reviewing this book for several reasons. First and foremost, there is real dearth of textbook material on the topic of neuro-optometry and acquired brain injury. Secondly, I have been extremely interested in this often criticized and much maligned sub-specialty of health care and the benefits that it has brought many of my patients with acquired brain injury.

The editors have put together a useful textbook dealing with various aspects of neuro-optometry and acquired brain injury. There are some introductory chapters that will be "old hat" for anyone with experience in the field. I would question the utility of these chapters in the context of such a focused book; however, they are reasonably well written. The book really "gets going" in chapter 4, which deals with neuropsychological consequences of mild brain injury and optometric implications. This chapter actually could have been more in-depth, as the issue of how visual perceptual impairment impacts neuropsychological testing, I think is generally poorly understood and/or inadequately taken into consideration by evaluating and treating neuropsychologists.

The next chapter on accommodation and acquired brain injury provides a nice overview of his problem in persons with ABI including assessment and treatment recommendations of this class of disorders. This chapter is particularly well referenced. The chapter on ocular motor consequences of acquired brain injury is a relatively short chapter that provides some nice summary tables. There is less detail in this chapter than the prior chapter on accommodative dysfunction but it provides a decent overview of the topics. Specific assessment and treatment techniques are not discussed. The emphasis of this chapter is more on an overview of identification of the problem and their incidence in various patient groups such as stroke, TBI and whiplash. The chapter on vision therapy for treatment of binocular vision disorders focuses on prognostic factors germane to good outcome from said treatment. The chapter emphasizes cases that do not provide a lot of in-depth detail regarding an algorhythmic approach or overview of the scientific foundation for the various prognostic parameters listed.

The subsequent chapter on expanded visual field assessment for patients with brain injury provides a very nice examination paradigm for a proposed more detailed visual field assessment in the context of examining persons with brain injury who have current visual dysfunction. The foundation for using this technique as opposed to other techniques is not explored and would have been helpful, nor is there any data on the potential benefits of using the proposed paradigm versus more traditional methodologies of visual field assessment.

The next chapter on egocentric localization in patients with visual neglect provides a very solid type specific foundation for the ensuing discussion and delved into an interesting new device for yoked prism adaptation and egocentric localization. The chapter on altered visual adaptation in patients with TBI delves into the issue of light sensitivity and photophobia. Although brief, this is one of the best discussions I have read on this topic. Most of this chapter deals with a small study assessing light sensitivity in seven experimental versus seven controlled subjects. Although this study was small, the results are interesting given the presence of the control group. The chapter on integration of visual and vestibular systems and balance disorders is extremely well written with a good discussion of the pathoanatomy and pathophysiology of the visuovestibular system and a subsequent excellent section reviewing diagnostic vestibular testing. Two cases are also included for review. Given the scope of the chapter, the references are a bit on the light side.

The chapter on vestibular therapy and ocular dysfunction deals with a case study by a physical therapist and although interesting, does not add much to the overall content of the text. The last chapter, written by an optometrist and physical therapist deals with the collaboration of optometry and physical therapy of the treatment of vestibular dysfunction after TBI. This is interesting chapter does a reasonably good job integrating the role of the optometrist and physical therapist and it.

I would note that overall the topics covered in this text would be of interest to any clinicians providing services to people with acquired brain injury, in particular, those with traumatic brain injury. The book has some level of duplication across the chapters but not enough for this reviewer to discourage people from having the text on their shelf given it's uniqueness and the absence of good core textbooks in the field of neuro-optometry and TBI. Obviously, this is a relatively young field that does not have the depth of scientific research that many other areas of TBI might have available. My overall rating for the book is a 7.5/10.

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