



**Acquired
Brain Injury
Network**

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Hilton Toronto • Toronto

Conference Presentation Abstract ~ Podium Presentation

Date/Time/Room: Tuesday, November 4, 2008 10:55 am – 11:40 am Carmichael / Jackson

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Title:

A New Approach to Old Problems: Implementing an Inpatient Vision Rehabilitation Service for Patients with Acquired Brain Injury

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Summary:

Vision is our primary sense and is fundamental to our ability to move through, respond and interact with our environment. Studies indicate that the incidence of visual dysfunction in individuals post Acquired Brain Injury (ABI) is 59%-65%.^(1,3) Given this information, 'visual system disorders and their rehabilitation should, therefore be viewed as an integral part of the rehabilitation program'.⁽²⁾

This presentation will outline the unique, interdisciplinary vision rehab service which has been implemented on the inpatient ABI program at Parkwood Hospital in an effort to address visual dysfunction in our patients and its negative impact on their recovery. The service is comprised of a visual screening tool, completed by the therapy team, an onsite visual assessment by an optometrist with specialized training in neuro-optometric rehabilitation who then provides recommendations for treatment.

The treatment strategies are implemented by the multidisciplinary team and include use of specialized prisms, patching and vision therapy exercises. These strategies can be incorporated into a patient's usual therapeutic regimen. This treatment of visual dysfunction can lead to improvements in many different areas of function including; reading, attention, balance and ambulation.

This presentation will also share data regarding therapists' perspectives on the benefits and challenges of the implementation of this service. Although it is rare for optometrists to work within a rehabilitation setting, we will explore the importance and value of having an optometrist work collaboratively with the multidisciplinary team.

Outcomes/Objectives:

- To introduce the concept of Neuro-optometric rehabilitation.
- To increase awareness of rehabilitation team of the impact of visual disturbance and expand the definition of vision.
- To provide a model for how to implement an inpatient vision rehabilitation service for patients with ABI.

(1) Schlageter, K., Gray, B., Hall, K., Shaw, R., and Sammet, R. (1993) Incidence and treatment of visual dysfunction in traumatic brain injury. *Brain Injury*, Vol. 7, No. 5, 439-448.

(2) Zoltan, B., *Vision Perception and Cognition, A Manual for the Evaluation and Treatment of the Adult With Acquired Brain Injury*, Fourth Edition (2007).

(3) Gianutsos, R., Ramsey, G., Perlin, R.R., (1988) Rehabilitative Optometric Services for Survivors fo Acquired Brain Injury. *Arch Phys Med Rehabil*, Vol 69, 573-578.