



# The nature of neuropsychological care

**By Robert B. Sica**

The personal injury arena has brought together two seemingly unrelated professions — tort law and neuropsychological care.

In my 30 years of clinical experience I have been forever impressed with the clinically astute observations of the attorney regarding the neuropsychological needs of their client. In many instances, if not for this attorney referring their client for treatment, this patient would be left with serious and permanent neuropsychological changes in the less significant head injury, for example, concussion. In the case of the significant traumatic brain injury, neuropsychological care can help with achieving maximum recovery in their adaptive functioning. I have had the distinct honor of working with attorneys in providing this neuropsychological care, in turn, providing me tremendous satisfaction in the patient's recovery.

## Definition

Exactly what is neuropsychological care? Since cognitive disorders derived from variants of traumatic brain injuries — the leading cause of death and disability under 40 — affect most of the daily

functioning of these victims, clinical neuropsychology has pursued these patients in the treatment recovery of this population.

Neuropsychological care is a discipline which has changed in the last few decades, becoming a required approach in neurological programs. Holistic neuropsychological care is related to all intellectual, emotional, behavioral, vocational and social aspects of the life of the patient who has suffered concussion or brain injury. It is carried out in a multidisciplinary manner with the neuropsychologist working together closely with other brain injury professionals.

The first step in neuropsychological care is the neuropsychological examination (NPE) — the “blueprint” if you will — of the patient's cognitive profile of their strengths and limitations, thereby serving as the basis for eventual treatment. Over the years, the value of the NPE has gone through changes. Originally, it was utilized to differentiate brain damaged patients versus psychiatric patients, localizing a lesion and differentiating between various cerebral conditions; for example, brain injury versus cerebral vascular accidents or

tumors. Today, from a practical point of view, these goals are out of date.

Nonetheless, the use of the NPE as the gateway into neuropsychological care has taken center stage. A valid NPE includes an assessment of the full range of cognitive functions sub-served by the brain, incorporating measurement strategies permitting application of the results to the individual patient and validation of the tests in terms of their relationship to the biological status of the brain. The essential point here is the purpose of the NPE is to evaluate each patient's brain rather than each patient's cognitive complaints. It also is an experiment or opportunity for the patient to reveal himself, as well as avoiding the legal question:

“Doctor, didn't you have to rely upon what the patient told you?”

Attorneys working with head injury cases need to understand one cardinal rule: There is often only a general correspondence between the clinical aspects of a head injury, the medical history and the observable behavioral impairment. It is therefore impossible to predict, with absolute accuracy, the functional capacities of the patient on the basis of a clinical

description of the head injury alone. Hence the availability of objective evidence via the NPE.

## Treatment planning

Once the NPE is completed, the next stage in the neuropsychological care of the patient is treatment planning or goal setting based on the results of the examination. The main goal is to attain a maximum degree of efficient daily adaptive functioning, help the patient assimilate the traumatic event and achieve the full potential of the patient's capacities via cognitive remediation, biofeedback, medical adjustment counseling, group counseling, family counseling and, if necessary, the conventional therapies of PT, OT, speech and medication regimens.

In neuropsychological care, the neuropsychologist plays a fundamental role in designing the rehabilitation program, coordinating the different levels of intervention with the patient so treatment sessions can be fully taken advantage of.

For instance, cognitive remediation focuses on paper-pencil and computer exercises addressing deficits in areas like attention-concentration, memory, reasoning and organizational abilities. Individual and group cognitive ecological rehabilitation sessions are also



held for this purpose, with recovered patients serving as role models for new patients entering the program. The level of functioning reached with these types of activities will benefit the patient in gaining greater daily efficiency and emotional development in those aspects related to self-esteem, leading to better adherence to treatment.

### Combined treatment strategies

Finally, behavioral and emotional disorders are treated with special combined strategies. The use of medical adjustment counseling versus psychotherapy is employed due to its different theoretical basis in regard to the psychological changes of the head injury patient. There are four primary assumptions in working with this type of patient. First, behavioral responses to the variants of brain injury rarely represent psychopathology. They are a reaction to the nature of the acute medical

crisis. Second, no two patients with the same head injury reflect similar functional coping responses. Third, the patient's adjustment reaction cannot be understood in a vacuum. Their relationships at home, work, school and in the community are often affected collectively. Finally, we assume the duration of a given crisis will vary from head injury to head injury and from patient to patient. A consistent question often asked of the patient is, "given the realistic confines of your injury, how can you create or modify your life to optimize functioning and enjoyment?"

This type of rehabilitative care has its historical roots in clinical neuropsychology. The unique aspect distinguishing it from other areas within psychology involves the emphasis on the neurological bases of behavior. Without clinical neuropsychology's application of knowledge of brain behavior relationships in human beings concerning clinical problems, neuropsychological care would be palliative at best. Its foundation emphasizes the relationship between behavior to brain structure and function.

In terms of tort law, over the past 25 years clinical neuropsychology has spawned a new field, namely, forensic neuropsychology — the application of clinical neuropsychology to legal questions. It focuses on answering the variety of legal questions where the action of the central nervous system is suspect. As previously stated, forensic neuropsychology is a term only recently coined. The field was envisioned at first as concerning itself with the behavioral consequences of head injuries.

In fact, the field is much broader, having slightly different meanings when applied to different provinces of the law. Besides civil law, it also applies to criminal law and the family court system.

In closing, the clinical neuropsychologist providing care to personal injury patients with a variety of brain injuries is in reality functioning as a forensic neuropsychologist due to the legal attachments of the clinical case. Thus, the neuropsychologist is aware of the variety of legal roles they are fulfilling. This is important since the neuropsychologist is often the most important health professional involved in these patients' long term management. These roles and responsibilities include, but are not limited to, (1) clinical treatment; (2) submitting neuropsychological/forensic reports; (3) treatment summaries; (4) providing consultant and expert testimony; (5) submitting data to third party payers as to the extent, duration, and permanence of disability; (6) directing family members to the appropriate agencies or community resources that will best meet their needs; and (7) collaborating with attorneys regarding case management. Collectively, rehabilitative treatment and forensic input to the case all fulfill the requirement of complete neuropsychological care.

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