Mild Traumatic Brain Injuries Pose Different Set of Rules

By Gerald Tramontano, PhD

Part Two of a Two-Part Article.

In last month's newsletter, we looked at the symptoms of traumatic brain injury (TBI) and the incentives plaintiffs who claim such injuries may have to exaggerate their symptoms. In this month's conclusion, we see how forensic experts test for and detect this type of fraud on defendants and their insurers.

HOW FORENSIC EXPERTS TEST FOR MALINGERING

For the most part, forensic experts in clinical neuropsychology — whether commissioned by the plaintiff's attorney or a defense attorney — administer a battery of cognitive tests to assess the patient's cortex, along with a standardized assessment of emotional and behavioral functioning. We begin the process by strongly encouraging patients to exert their best effort, explaining that they may have a brain injury and, as such, attempts to exaggerate their symptoms during testing will only undermine their credibility. The tests are sensitive enough, we remind them, that they must avoid the need to "highlight" their symptoms. This sort of behavior only ends up compromising their cases.

The evaluator will also look for discrepancies between the behavioral data collected in the interview and the standardized test results. For example, a patient who appears articulate and shows no dysnomia (i.e., naming problems) or other signs of potential cortical pathology during the clinical interview, yet performs poorly on a naming test, would reveal a significant discrepancy that likely indicates malingering.

In general, the classic malingering tests appear very difficult at first glance, but are really simple. They were engineered and tested for the express purpose of diagnosing malingering. They get patients to show whether or not they are malingering, since even those suffering from severe brain injuries will be able to perform at a certain level. We also categorize the results based on chance: Using statistics, we determine that on a certain test a patient will get around 50% right and 50% wrong. If the test taker's results fall below where they would if he'd answered by chance, this indicates a "negative response bias."

TESTING

The pattern of performance on non-malingering tests can also indicate malingering. If, for example, the patient is found to be in the mildly impaired range on the encoding and retrieval portions of a memory test, but falls into the severe impairment range on the recognition format, something is amiss; it's an impossibility. That's not how the brain functions.

All neuropsychological testing is interpreted on what is called "premorbid estimate IQ." We view the current neuropsychological results not just on the basis of regular norms for a patient's age and education level, but on the basis of the intelligence level the patient exhibited before the injury. For example, a person who previously had an IQ of 140, may now be found to fall into the average range on many tests of cognitive functions. That individual, however, will be three standard deviations below where he was pre-injury, indicating severe deficits in cognitive functions for this individual reflective of brain damage.

Similarly, from a malingering perspective, we look at results that do not match the individual's history. If we get a very bright person with an IQ in the superior range with, what all evidence points to, is a mild brain injury, test results should not fall far below what is likely to be scored by someone with a mild brain injury with that level of premorbid estimated IQ.

Advances in neuroimaging have supported the neuropsychologist's ability to test subjects for malingering. The advent of Single Photon Emission Computed Tomography (SPECT) (a nuclear medicine imaging technique) and Quantitative Electroencephalograph (QEEG) (a measurement, using digital technology, of electrical patterns at the surface of the scalp) scans provides for additional insight within the context of a complete neuropsychological exam. For example, if the evaluator picks up possible discrepancies between the test results and the clinical observation for a patient with a certain type of injury raising the suspicion of malingering, and the patient's brain mapping results are completely unremarkable, this provides an extra layer of evidence supporting a malingering diagnosis.

At our clinic, we use a set of criteria adapted from Slick, Sherman and Iverson (1999) to support malingering diagnoses of cognitive and psychiatric disorders. In order to substantiate a malingering diagnosis the presence of a substantial external incentive must be evidenced, and the behavior and symptoms of the patient must not be able to be fully accounted for by a psychiatric, neurological or neurodevelopmental disorder. In addition the following criteria must be met:

- **Definite Malingering:** There is evidence of "negative response bias"* of cognitive or psychiatric dysfunction on neuropsychological testing.

*On a certain test, a patient who makes random choices when there are two possible answers to choose from will get somewhere around 50% right and 50% wrong. If the test

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times, the Code of Hammurabi addressed the physician's dual responsibility to the patient and to society. In the modern world, bioethics as a specific field of study has emerged as a separate discipline, and ethical behavior remains funda-

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majority of neurosurgeons" would agree that the method used in the surgery he was asked to testify about was incorrect and that the injury suffered by the patient had to have resulted from the surgeon's negligence as there was no other possible cause. In arriving at these opinions, Dr. Austin had relied on two scholarly sources. The findings of the panel about the reliability of these sources of support are not mentioned in either the Seventh Circuit opinion nor in the District Court opinion (120 F. Supp. 2nd 1151). However, the Seventh Circuit on its own initiative found neither publication supported Dr. Austin's hypothesis: "Cloward [the first article] was making a general statement of reassurance about the avoidability of serious complications of his pet operation, not anything specifically to do with the risk of permanent damage ... Watkins [the sec-
ond article] never suggested that all ... injuries ... could be prevented by being gentle." Id. at 970. Surprisingly, the Seventh Circuit then began research on its own: "There is an abundance of up-to-date relevant literature easily retrievable from the World Wide Web. There we discovered in a cursory search that [the damage from the surgery] ... is a known though fortunately rare complication of ... [the surgery]." [Citation to Web address omitted.] Id. at 971.

This judicial research into neurology is surprising, however, because the Seventh Circuit specifically found that "The American Association of Neurological Surgeons knows a great deal more about [the operation and Dr. Austin's criticism] than any judge." Id. at 973. Despite that rationale, the Seventh Circuit obviously still felt the association's findings needed some help. However, no request for reconsideration was made, and certiorari was denied by the U.S. Supreme Court. 534 U.S. 1078 (2002).

A final portion of the Seventh Circuit decision held that Dr. Austin could not have proven damages, in part because the association's findings were true. So, the court found, had Austin proved a wrong, he would have had to partition the injury resulting from it between the part due to the revelation of truthful information and the part due to the disciplinary suspension itself. Id. at 974. Of course, since the court found its review of voluntary organizational discipline to be limited to procedural due process, it is difficult to understand how the truth of falsity of the organization's findings should ever come to the court's attention, and consequently, how damages are ever to be found, let alone apportioned.

In next month's issue, we will explore the consequences professional organization censure have on an expert witness and on the legal process.

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taker's results fall far below chance, this indicates a "negative response bias."

• Probable Malingering: Excluding a negative response bias on testing, there is evidence of exaggeration or fabrication of cognitive or psychiatric dysfunction due to a discrepancy between test data or a patient's self-reported symptoms and the following:
  1. Known patterns of brain dysfunction;
  2. Observed behavior;
  3. Reliable collateral reports; and
  4. Background history.
• Possible Malingering: Excluding a negative response bias on testing, there is evidence of exaggeration or fabrication of cognitive or psychiatric dysfunction due to a discrepancy between a patient's self-reported symptoms and the following:
  1. Known patterns of brain dysfunction;
  2. Observed behavior;
  3. Reliable collateral reports; and
  4. Background history.

Determining if the cognitive deficits and psychiatric symptoms of a patient are real or feigned remains an imperfect science, yet new tools and methods have greatly improved the odds of an accurate diagnosis in the hands of experienced experts in clinical neuroscience. Such diagnoses should be considered a key feature of any defense strategy in cases involving traumatic brain injury.