Differentiating Malingerers and Patients With Conversion Disorder Using a Computerized Neurocognitive Assessment Battery

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ABSTRACT

Background: There are many effective clinical strategies and neuropsychological tests to distinguish between patients with genuine medical disorders and patients whose problems are somatiform or malingering. Differentiating between people who are malingering in neurological or psychiatric conditions and patients with conversion disorders (CD) is another matter entirely. Methods for distinguishing between the two conditions are not well-developed, and the distinction represents a formidable challenge.

Purpose: To determine whether computerized tests can be used to distinguish people who are malingering from people who are truly disabled.

Subjects: From the clinical database, 83 patients were identified either as malingers (MAL, N=77) or as patients with conversion disorder (CD, N=6). Together, we refer to them as group C_M. Their performance on the CNS Vital Signs battery was compared to that of age-matched normal controls (NML), patients with depression (DEP) and patients who had had moderate-to-severe traumatic brain injuries (TBI). Each domain score is the average of at least 10 test scores.

Conclusions: The NCI ia calculated from 5 domains: memory, psychomotor speed, reaction time, complex attention and cognitive flexibility. The NCI is reported as a standard score, with a mean of 100 and a standard deviation of 15.

RESULTS: The C_M group performed much worse than normals and patients with depression or brain injuries in all of the tests and sub-tests. This is captured by the Neurocognitive Index (NCI) which is generated as a standard score. The NCI is calculated from 5 domains: memory, psychomotor speed, reaction time, complex attention and cognitive flexibility. The C_M group performed much worse than normals and patients with depression or brain injuries in all of the tests and sub-tests. This is captured by the Neurocognitive Index (NCI) which is generated as a standard score. The NCI is calculated from 5 domains: memory, psychomotor speed, reaction time, complex attention and cognitive flexibility. The NCI is reported as a standard score, with a mean of 100 and a standard deviation of 15.

A FORCED-CHOICE PARADIGM LIKE THE TOMM

On the verbal and memory tests, total correct score less than 60 indicates performance lower than chance levels. None of the normals, none of the patients with depression, brain injury or CD scored less than 60 on the memory composite score, total correct score less than 60 on the memory composite score. Computerized testing will indicate that CD patients perform worse than patients who have had brain injuries, and that malingers will perform even worse. Measures of psychomotor speed and RTV are especially important variables to consider. However, computerized tests can generate forced-choice paradigms similar to conventional neuropsychological tests, and picking similar results, such tests are, beyond a reasonable doubt, indicative of willful exaggeration.

CONCLUSION: When conventional neuropsychological tests are coupled with reaction time measures, including RTV, one may be able to differentiate between patients who are only pretending to be disabled from patients with somatoform disorders. Computerized testing will indicate that CD patients perform worse than patients who have had brain injuries, and that malingers will perform even worse. Measures of psychomotor speed and RTV are especially important variables to consider. However, computerized tests can generate forced-choice paradigms similar to conventional neuropsychological tests, and picking similar results, such tests are, beyond a reasonable doubt, indicative of willful exaggeration.

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