Mr. P pleads not guilty to rape charges, claiming a head injury 8 years ago caused personality changes, psychosis, and violent behavior. Is he malingering?

Which cognitive impairment is most common among patients with head injury?

a) impaired attention 
b) memory loss 
c) impulse dyscontrol 
d) poor judgment

The authors’ observations

Although defendants may legitimately suffer from TBI and resultant complications, many individuals capitalize on a history of minor head injury to support their NGRI defense.1 Forensic psychiatrists must retain a healthy degree of clinical suspicion for malingering in defendants who claim NGRI as a result of complications from brain injury, especially when the injury and complications are not documented and simply patient-reported.

TBI is a CNS injury that occurs when an outside force traumatically injures the brain and can cause a variety of physical, cognitive, emotional, and behavioral effects (Table 1, page 65).2 Cognitive deficits include:

- impaired attention
- disrupted insight
- poor judgment
- thought disorders

Dr. Farrell is a fourth-year psychiatry resident, The University Hospital, University of Cincinnati, OH. Dr. Nasrallah is CURRENT PSYCHIATRY Editor-in-Chief and professor of psychiatry and neuroscience, department of psychiatry, University of Cincinnati, OH.
Reduced processing speed, distractibility, and deficits in executive functions such as abstract reasoning, planning, problem solving, and multitasking have been documented. Memory loss—the most common cognitive impairment among head-injured people—occurs in 20% to 79% of people with closed head trauma, depending on injury severity. People who have suffered TBI may have difficulty understanding or producing spoken or written language, or with more subtle aspects of communication, such as body language.

TBI may cause emotional or behavioral problems and personality changes. Mood and affect changes are common. TBI predisposes patients to obsessive-compulsive disorder, substance abuse, dysthymia, clinical depression, bipolar disorder, phobias, panic disorder, and schizophrenia. Frontal lobe injuries have been correlated with disinhibition and inappropriate or childish behavior, and temporal lobe injuries with irritability and aggression.

**TBI and the insanity defense**

The M’Naghten Rule of 1843 requires that for an insanity defense, the defendant must have a mental disease or defect that causes him not to know the nature and quality or the wrongfulness of his act. TBI is an abnormal condition of the mind leading to a mental disease that can substantially affect control of emotions and behaviors.

Nevertheless, TBI-induced criminality remains controversial. Theories on the etiology of impulse dyscontrol resulting from TBI have suggested structural damage to the brain and altered neurotransmitters. In TBI, the amygdala—which is located within the anterior temporal lobe and adjoins emotions to thoughts—often is injured. Damage to this structure leads to poor impulse control and violent behavior. Damage to specific
neurotransmitter systems that cause elevated norepinephrine and dopamine levels and reduced serotonin levels have also been implicated as a cause of impulse dyscontrol in TBI patients.8

In theory, TBI patients potentially could have enough cognitive impairment to have a substantial lack of appreciation of the criminality or wrongfulness of an act. TBI-related impulsivity and cognitive impairment can lead to recklessness and negligence.9 The U.S. Supreme Court has acknowledged that CNS dysfunction affects judgment, reality testing, and self-control.10

Because of Mr. P’s reluctance to share information, his lack of psychiatric symptoms other than those he self-reports, and the presence of potential secondary gain from an NGRI defense, the psychiatrist begins to suspect malingering.

### The authors’ observations
Malingering is a condition—not a diagnosis—characterized by intentional production of false or grossly exaggerated physical or psychological symptoms motivated by external incentives.11 The presence of external incentives distinguishes malingering from psychiatric illnesses such as factitious and somatoform disorders, in which there is no apparent external incentive. Malingering of psychiatric symptoms occurs in up to 20% of forensic patients, 5% of military recruits, and 1% of mental health patients.9 Stimuli for malingering range from seeking food and shelter to avoiding criminal responsibility (Table 2, page 65). Malingering is more common in individuals being evaluated for criminal responsibility than for competence to stand trial. The 3 categories of malingering are:

- pure malingering—feigning a nonexistent disorder
- partial malingering—consciously exaggerating real symptoms

### Table 3
Criteria for malingered psychosis

<table>
<thead>
<tr>
<th>A. Understandable motive to malingering</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Marked variability of presentation as evidenced by ≥1 of the following:</td>
</tr>
<tr>
<td>1. Marked discrepancies in interview and non-interview behaviors</td>
</tr>
<tr>
<td>2. Gross inconsistencies in reported psychotic symptoms</td>
</tr>
<tr>
<td>3. Blatant contradictions between reported prior episodes and documented psychiatric history</td>
</tr>
<tr>
<td>C. Improbable psychiatric symptoms as evidenced by ≥1 of the following:</td>
</tr>
<tr>
<td>1. Reporting elaborate psychotic symptoms that lack common paranoid, grandiose, or religious themes</td>
</tr>
<tr>
<td>2. Sudden emergence of purported symptoms to explain antisocial behavior</td>
</tr>
<tr>
<td>3. Atypical hallucinations and delusions</td>
</tr>
<tr>
<td>D. Confirmation of malingering by either:</td>
</tr>
<tr>
<td>1. Admission of malingering following confrontation, or</td>
</tr>
<tr>
<td>2. Presence of strong corroborative information, such as psychometric data or history of malingering</td>
</tr>
</tbody>
</table>

Source: Reference 14

### EVALUATION
Vague answers

To determine whether Mr. P’s defense is plausible, the forensic psychiatrist must pay attention to the details of the patient’s presentation and history. During the interview, Mr. P quickly shifts from cooperative to obstinate and restricted. He ruminates on the head injury causing him to suffer auditory hallucinations, which he claims he always obeys. Mr. P refuses to provide details of the hallucinations, however, and answers most questions about the head injury or his defense with vague answers, including “I don’t know.”
INVEGA® (paliperidone) Extended-Release Tablets

Overall, of the total number of subjects in schizophrenia clinical studies of INVEGA® (n = 1769), including those who received INVEGA® or placebo, 125 (7.0%) were 65 years of age and older and 22 (1.2%) were 75 years of age and older. No overall differences in safety or effectiveness were observed between these subjects and younger subjects, and other reported clinical experience has not identified differences in response between the elderly and younger patients, but greater sensitivity of some older individuals cannot be ruled out.

This drug is known to be substantially excrated by the kidney and clearance is decreased in patients with moderate to severe renal impairment [see Clinical Pharmacology (12.3) in full PI], who should be given reduced doses. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to monitor renal function [see Dosage and Administration (2.5) in full PI].

Renal Impairment: Dosing must be individualized according to the patient’s renal function status [see Dosage and Administration (2.5) in full PI].

Hepatic Impairment: No dosage adjustment is required in patients with mild to moderate hepatic impairment. INVEGA® has not been studied in patients with severe hepatic impairment.

**DRUG ABUSE AND DEPENDENCE**

**Controlled Substance:** INVEGA® (paliperidone) is not a controlled substance.

**Abuse:** Paliperidone has not been systematically studied in animals or humans for its potential for abuse. It is not possible to predict the extent to which a CNS-active drug will be misused, diverted, and/or abused once marketed. Consequently, patients should be evaluated carefully for a history of drug abuse, and such patients should be observed closely for signs of INVEGA® misuse or abuse (e.g., development of tolerance, increases in dose, drug-seeking behavior).

**Dependence:** Paliperidone has not been systematically studied in animals or humans for its potential for tolerance or physical dependence.

**OVERDOSAGE**

**Human Experience:** While experience with paliperidone overdose is limited, among the few cases of overdose reported in pre-marketing trials, the highest estimated ingestion of INVEGA® was 405 mg. Observed signs and symptoms included extrapyramidal symptoms and gait unsteadiness. Other potential signs and symptoms include those resulting from an exaggeration of paliperidone’s known pharmacological effects, i.e., drowsiness and somnolence, tachycardia and hypotension, and QT prolongation.

Paliperidone is the major active metabolite of risperidone. Overdose experience reported with risperidone can be found in the OVERDOSAGE section of the risperidone package insert.

**Management of Overdose:** There is no specific antidote to paliperidone, therefore, appropriate supportive measures should be instituted and close medical supervision and monitoring should continue until the patient recovers. Consideration should be given to the extended-release nature of the product when assessing treatment needs and recovery. Multiple drug involvement should also be considered.

In case of acute overdose, establish and maintain an airway and ensure adequate oxygenation and ventilation. Gastric lavage (after intubation if patient is unconscious) and administration of activated charcoal together with a laxative should be considered.

The possibility of obtundation, seizures, or dystonic reaction of the head and neck following overdose may create a risk of aspiration with induced emesis.

Cardiovascular monitoring should commence immediately, including continuous electrocardiographic monitoring for possible arrhythmias. If antithrombotic therapy is administered, disopyramide, procainamide, and quinidine carry a theoretical hazard of additive QT-prolonging effects when administered in patients with an acute overdose of paliperidone. Similarly the alpha-blocking properties of bretylium might be additive to those of paliperidone, resulting in problematic hypotension.

Hypotension and circulatory collapse should be treated with appropriate measures, such as intravenous fluids and/or sympathomimetic agents (epinephrine and dopamine should not be used, since beta stimulation may worsen hypotension in the setting of paliperidone-induced alpha blockade). In cases of severe extrapyramidal symptoms, anticholinergic medication should be administered as needed.

Inactive ingredients are carnauba wax, cellulose acetate, hydroxyethyl cellulose, propylene glycol, polyethylene glycol, polyethylene oxides, povidone, sodium chloride, stearic acid, butylated hydroxytoluene, hypromellose, titanium dioxide, and iron oxides. The 3 mg tablets also contain lactose monohydrate and triacetin.

**Manufactured by:**
ALZA Corporation, Vacaville, CA 95688 OR
Janssen Cilag Manufacturing, LLC, Gurabo, Puerto Rico 00778

**Manufactured for:**
Janssen, Division of Ortho-McNeil-Janssen Pharmaceuticals, Inc., Titusville, NJ 08560

OROS is a registered trademark of ALZA Corporation
©Ortho-McNeil-Janssen Pharmaceuticals, Inc. 2007 Revised: January 2010

---

### Atypical psychotic symptoms that suggest malingering

**Table 4**

<table>
<thead>
<tr>
<th>Hallucinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous rather than intermittent</td>
</tr>
<tr>
<td>Vague or inaudible auditory hallucinations</td>
</tr>
<tr>
<td>Stilted language reported in hallucinations</td>
</tr>
<tr>
<td>Inability to state strategies to diminish voices</td>
</tr>
<tr>
<td>Self-report that all command hallucinations were obeyed</td>
</tr>
<tr>
<td>Visual hallucinations in black and white</td>
</tr>
</tbody>
</table>

**Delusions**

| Abrupt onset or termination |
| Eagerness to call attention to delusions |
| Conduct markedly inconsistent with delusions |
| Bizarre content without disordered thinking |

**Source:** Reference 14

- false imputation—ascrining real symptoms to cause the individual knows is unrelated to the symptoms.

Determining if a defendant with a history of TBI is malingering requires a multi-step approach that encompasses the clinical interview, a thorough review of collateral data, and focused psychological testing. In interviews, psychiatrists detect approximately 50% of lies, which is no better than would be discovered by chance. If you suspect a patient is malingering, combine a structured clinical interview with collateral sources such as old hospital records, treatment history, insurance records, police reports, and interviews with close family and friends.

TBI patients’ poor cognition, memory deficits, and inattention will prove challenging. Malingering patients who attempt to capitalize on a pre-existing TBI to evade responsibility for a current criminal charge may grossly exaggerate or even fake intellectual deficits. Be patient with such defendants and remain aware that such people will give vague or hedging answers to straightforward questions, often accompanied by “I don’t know.” Prolonging the interview may be helpful because it may fatigue a defendant who is faking.

Some patients who malingering after sustaining a TBI will attempt to feign psychotic symptoms. **Table 3** illustrates criteria for assessing a patient suspected of malingering psychosis and **Table 4** highlights atypical psychotic symptoms that suggest feigning illness. Malingering of psychosis can be both assessed in the interview and through testing.
The Personal Assessment Inventory (PAI) is a 344-item test with a 4-point response format. The 22 scales cover a range of important axis I and II psychopathology.

SIRS is the gold standard in detecting malingered psychiatric illness; it includes questions about rare symptoms and uncommon symptom pairing. M-FAST was developed to provide a brief, reliable screen for malingered mental illness. It has shown good validity and high correlation with the SIRS and MMPI-2.

Tests of exaggerated cognitive impairment are extremely important in evaluating patients who claim to suffer from complications following TBI. TOMM—a 50-item recognition test designed to discriminate between true memory-impaired patients and malingerers—is the most studied and valid of such tests. Defendants’ scores that meet the recommended criteria for detecting malingering—≥5 errors on the retention trial—were found to also report a history of head injury.

Although not as well validated, the Portland Digit Recognition Test (PDRT) is an alternative to the TOMM. This test is a forced-choice measure of recognition designed for assessing the possibility of malingering in psychological testing

Several standardized diagnostic instruments can be used to help determine whether a patient is feigning or exaggerating psychotic symptoms or cognitive impairments (Table 5). Testing for a patient such as Mr. P—who attributes any criminal wrongdoing to psychosis and also cites limited cognition as a reason for trouble in the interview—would include personality tests, tests to assess exaggerations of psychosis, and cognitive tests.

In the forensic setting, the preferred personality test is the MMPI-2. It consists of 567 items, with 10 clinical scales and several validity scales. The F scale, “faking good” or “faking bad,” detects people who are answering questions with the goal of appearing better or worse than they actually are.

The Personal Assessment Inventory (PAI) is a 344-item test with a 4-point response format. The 22 scales cover a range of important axis I and II psychopathology.

SIRS is the gold standard in detecting exaggerated psychotic symptoms and uncommon symptom pairing. M-FAST was developed to provide a brief, reliable screen for malingered mental illness. It has shown good validity and high correlation with the SIRS and MMPI-2.

Tests of exaggerated cognitive impairment are extremely important in evaluating patients who claim to suffer from complications following TBI. TOMM—a 50-item recognition test designed to discriminate between true memory-impaired patients and malingerers—is the most studied and valid of such tests. Defendants’ scores that meet the recommended criteria for detecting malingering—≥5 errors on the retention trial—were found to also report a history of head injury.

Although not as well validated, the Portland Digit Recognition Test (PDRT) is an alternative to the TOMM. This test is a forced-choice measure of recognition designed for assessing the possibility of malingering in

<table>
<thead>
<tr>
<th>Table 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standardized diagnostic instruments for detecting malingering</strong></td>
</tr>
<tr>
<td><em>Clinical use</em></td>
</tr>
<tr>
<td><strong>Personality</strong></td>
</tr>
<tr>
<td>MMPI-2</td>
</tr>
<tr>
<td>PAI</td>
</tr>
<tr>
<td><strong>Psychotic symptoms</strong></td>
</tr>
<tr>
<td>SIRS</td>
</tr>
<tr>
<td>M-FAST</td>
</tr>
<tr>
<td><strong>Cognitive impairment</strong></td>
</tr>
<tr>
<td>TOMM</td>
</tr>
<tr>
<td>PDRT</td>
</tr>
<tr>
<td>VSVT</td>
</tr>
<tr>
<td>WMT</td>
</tr>
</tbody>
</table>

M-FAST: Miller Forensic Assessment of Symptoms Test; MMPI-2: Minnesota Multiphasic Personality Inventory; PAI: Personal Assessment Inventory; PDRT: Portland Digit Recognition Test; SIRS: Structured Interview of Reported Symptoms; TOMM: Test of Memory Malingering; VSVT: Victoria Symptoms Validity Test; WMT: Word Memory Test
Related Resource


Disclosure

Dr. Nasrallah receives research grant/research support from Forest Pharmaceuticals, GlaxoSmithKline, Janssen, Otsuka America Pharmaceuticals, Pfizer Inc., Roche, sanofi-ventis, and Shire, is on the advisory board of Abbott Laboratories, AstraZeneca, Janssen, Novartis, Pfizer Inc., and Merck, and is on the speakers’ bureau for Abbott Laboratories, AstraZeneca, Janssen, Novartis, Pfizer Inc., and Merck.

Dr. Farrell reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

individuals claiming mental illness because of head injury. The Victoria Symptoms Validity Test (VSVT)\(^2\) is used in outpatient and inpatient settings and also uses a forced-choice model to assess possible exaggeration or feigning of cognitive impairments. Finally, the Word Memory Test (WMT)\(^2\) is a neuropsychological assessment that evaluates the effort participants put forth.

OUTCOME Unsupported claims

Mr. P’s hospital records reveal a very minor head trauma that resulted in no structural brain abnormalities on imaging tests. Collateral interviews with Mr. P’s family and close friends fail to support the defendant’s claim that after the accident he began to experience behavioral changes and periods of psychosis. Mr. P’s SIRS and TOMM scores indicate malingering, and the psychiatrist did not support his NGRI defense.

References


Bottom Line

Patients who face criminal charges may plead not guilty by reason of insanity and cite head injury as a cause of their psychiatric symptoms and crime. Traumatic brain injury can produce cognitive and mood symptoms but its role in impulse dyscontrol remains controversial. Forensic psychiatrists must employ structured clinical interviews with collateral records and objective psychological testing to assess such defendants.