Short Communication

Detecting malingering of Ganser-like symptoms with tests: A case study

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Abstract   A middle-aged man presented with Ganser symptoms. He had been involved in a car crash and was seeking disability insurance benefits. Extensive testing with malinger instruments revealed that he performed below chance on simple memory tests and endorsed a variety of nonexistent symptoms. With this in mind, the authors collected collateral information which showed that the patient was involved in high level sports activities that were difficult to reconcile with the severe cognitive dysfunctions that he claimed to suffer from. The case demonstrates that Ganser-like symptoms deserve close scrutiny, preferably with malinger tests.

INTRODUCTION

Over the past few years, a burgeoning literature has addressed the phenomenon of malingering, that is, the fabrication or exaggeration of symptoms. One offshoot of this research interest has been the development and validation of psychometric tools to screen for malingering.[1] These tools can be of tremendous help in elucidating the nature of certain psychiatric symptoms. A case in point is Ganser syndrome. A key feature of this syndrome is the tendency of the patient to give approximate answers to simple questions. For example, when asked to calculate $2 + 2$, Ganser patients typically come up with near-miss answers like '3' or '5'. Additional symptoms are clouding of consciousness, memory defects, and conversion symptoms.[2] While the Diagnostic and Statistical Manual, fourth edition–text revision classifies Ganser syndrome under the heading of the dissociative disorders, some authors have argued that it is related to posterior brain impairment[3] or frontotemporal lobe dementia.[4] Still others opine that Ganser syndrome reflects the intentional simulation of psychiatric symptoms as lay people understand them.[5] Indeed, experts[6] have pointed out that the most prominent Ganser symptom – that is, approximate answering – is also a typical 'fake bad response style', but that in itself does not imply that Ganser syndrome is a manifestation of malingering.[7] Meanwhile, with only one exception,[4] studies have failed to look at the performance of patients with Ganser-like symptoms on well-established malinger tests. The case example that follows exemplifies that by using specialized malinger tools, clinicians can evaluate more thoroughly the probability of Ganser syndrome and its differential diagnostic alternatives, notably malingering.

CLINICAL CASE

A middle-aged architect without psychiatric history crashed his car into a wall alongside a country road in the Northern part of Holland. The circumstances surrounding the accident were never resolved. He was not injured, but was confused and was, therefore, admitted to an emergency ward. His Glasgow Coma Scores were normal. Magnetic resonance imaging and positron emission tomography scans of his brain were unremarkable. After several hours, he was discharged. Nevertheless, the patient said he had developed chronic memory difficulties since the accident. He complained

of headaches, lack of concentration, and feelings of exhaustion. The patient said he had become fully dependent on his wife. His daily pattern purportedly consisted of staring at the television and going out for small walks with his dog. After several visits to the family doctor, the patient said that he would not be able to return to his building firm of which he was a co-owner. He claimed disability insurance benefits. The insurance company referred him to a psychiatrist for an evaluation. This expert noted that the patient systematically responded with near-miss answers to simple questions. Other symptoms were a clouded consciousness and an unstable gait. The psychiatrist concluded that the patient suffered from Ganser syndrome. He considered it to be a dissociative reaction to an aversive life event, namely the accident. As the patient said he was unable to remember all sorts of details from his youth (e.g. his school, his friends), the insurance company referred him to the authors for neuropsychological assessment.

The authors saw the patient 3 years after the car crash. He told us that his cognitive functioning had not improved during that period, which was confirmed by his wife. During the authors' interview with the patient, one outstanding feature was, indeed, his tendency to give approximate answers to simple questions. Following the interview, the authors gave the patient the tests listed in Table 1. As can be seen, The Mini-Mental State Examination score of the patient was extremely low, suggesting serious cognitive impairment. Likewise, his performance on the Rey Auditory-Verbal Learning Test suggested a severely compromised learning and memory capacity, with the patient being able to reproduce after a short delay only three words of the repeatedly presented 15-words list.[8]

On a famous faces test involving 60 trials of famous Dutch persons who have to be classified into four categories (politicians, sportsmen, writers, artists), the patient's overall performance (33%) was poor, but still above chance level (25%). Yet, for one category (writers), it significantly dropped below chance level, indicating deliberate avoidance of correct categories. The same was true for the second part of this test, in which the patient has to discriminate between 12 previously seen faces and 12 new faces. Here, his performance was well below chance level (i.e. 25% against 50%). The Amsterdam Short-Term Memory test is a word-recognition test to detect malingering of memory complaints.[9] Briefly, it consists of 30 trials, each trial involving the presentation of five semantically related words, a simple distraction task, and a 5-item recognition task that repeats three of the five earlier presented words. These three target words have to be recognized by the patient. Therefore, the maximum score is 90 (i.e.

Table 1. Performance on orientation (MMSE), memory (AVLT), and malinger tests (Famous Faces Test, ASTM, MENT, SIMS) of a middle-aged patient with Ganser-like symptoms

Test	Raw score (total score)	Percentile/chance level/cut-off*
MMSE	17 (30)	10th
AVLT		
Trial I	2 (15)	05th
Trial V	5 (15)	05th
Total I to V	20 (75)	05th
Delayed recall	3 (15)	05th
Famous Faces Test		
Recognition	33%	25%
Old-new discrimination	25%	50%
ASTM	56 (90)	<85
MENT	12 (60)	>9
SIMS	31 (75)	>17

*For MMSE and AVLT (age and education adjusted) percentile scores are given, for the Famous Faces Test chance level performance is given, and for ASTM, MENT, and SIMS raw cut-off scores are given.

ASTM, Amsterdam Short-Term Memory Test; AVLT, Auditory-Verbal Learning Test; MENT, Morel Emotional Numbing Task; MMSE, Mini-Mental State Examination; SIMS, Structured Inventory of Malingered Symptomatology.

30×3 target words). Research has shown that even among neurological patients, scores below 85 are rare. The current patient had a score far below this cut-off, suggesting intentional avoidance of correct words.

The Morel Emotional Numbing Task is used to identify response bias in patients who claim to suffer from trauma-related distress.[10] The test consists of 60 trials on which emotional faces are shown. Using a two-alternative forced choice format, the patient has to link faces to correct verbal labels (e.g. 'happy', 'sad'). Errors are summed, with scores above 9 indicating suspect presentation. The present patient had a score exceeding this cut-off. The Structured Inventory of Malingered Symptomatology consists of 75 true–false items, with most items describing bizarre or unlikely symptoms (e.g. 'Even though I'm depressed most of the time, I feel best in the morning after a good night's sleep'; 'I cannot remember whether or not I have been married').[11] Patients who endorse more than 17 of such symptoms are suspected of malingering. The current patient claimed to suffer from 31 symptoms.

In sum, then, the patient exhibited a pattern of below chance-level performance and atypical symptom endorsement. Therefore, the authors decided to collect

collateral information in the public domain about him. The authors found that in the period that they had tested him, the patient had been quite busy as a sportsman participating – not without success – in several large competitions. He also volunteered as an officially registered sports umpire. It is difficult to imagine how a patient who claims he forgot his own birthday date and says he cannot perform simple calculations, is able to serve as an umpire in sports tournaments. Considering all the evidence, the authors have little doubt that the patient's Ganser-like symptoms were fabricated so as to obtain insurance payments.

DISCUSSION

The Diagnostic and Statistical Manual, fourth edition–text revision views Ganser syndrome as a dissociative condition, the core assumption being that it is a stress-related reaction for which malingering can – and indeed must – be ruled out. Meanwhile, there is an extensive literature showing that clinicians are not very versed in detecting malingering when they have to rely on interviews alone.[12] The present case study shows that malinger tests in combination with collateral evidence may enable clinicians to rule in or out the differential diagnosis of malingering. Of course, the psychometric tools the authors employed are not specific to Ganser-like symptoms, but might be applied to a broad range of psychiatric conditions in which malingering is a distinct possibility that warrants serious consideration. The authors don't intend to argue that malingering rather than brain impairment or dissociation accounts for all cases in which patients present with Ganser-like symptoms. However, with only one exception,[4] the published studies on patients with such symptoms never included psychometrically sound malinger tests. The authors think that clinicians would be well-advised to use such tests whenever they are confronted with Ganser-like symptoms in their patients. Admittedly, even with the whole range of diagnostic tools including tests, one is left with a subgroup of borderline cases in which authentic and malingered symptoms seem to overlap to a degree that makes a diagnosis impossible.

In his original publication, Ganser[13] emphasized that his patients were detainees, an observation that since then has been replicated in many subsequent case descriptions of Ganser syndrome.[2] The current patient had no forensic background, but he did have a major life event in his personal history (e.g. car crash) and additionally, he claimed to have memory deficits (e.g. vague autobiographical memories). Both elements seem to point directly to an authentic dissociative disorder, yet the psychometric testing and collateral information made clear that even in such cases, clinicians should not take the dissociative nature of Ganser-like symptoms for granted. Neither should the fact that a patient has a history of head injury lead to the conclusion that his or her Ganser-like symptoms are organic in nature. It is possible that in these cases, patients draw upon their familiarity with postconcussion symptoms to fabricate cognitive dysfunctions.[14]

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