

Houston Neuropsychology Associates, PLLC

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Neuropsychological Evaluation

Name: Madieu Lewally

Referral Source: Desiree Thomas, M.D.

Date of Birth: 11/24/51

Date of Evaluation: 3/16/26

Reason for Referral: Mr. Lewally's neurologist referred him for neuropsychological evaluation due to suspected cognitive decline. Results will elucidate his current level of functioning to inform diagnostic decision-making and treatment planning.

Functions Assessed and Instruments Employed:

Background

Clinical Interview

Medical History Questionnaire

Intellectual

Wechsler Adult Intelligence Scale – IV (portions)

Language

Token Test (MAE)

NAB Naming Test

Verbal Fluency (FAS)

Semantic Fluency (Animal Naming)

Word Reading (WRAT-5)

Visuospatial/Constructional

Judgment of Line Orientation

Rey Complex Figure Test (copy)

Attention

Digit Span (WAIS-IV)

Symbol Search (WAIS-IV)

Learning and Memory

Hopkins Verbal Learning Test – Revised

Logical Memory (WMS-IV)

Visual Reproduction (WMS-IV)

Executive Functions

Color Trails Test

Modified Wisconsin Card Sorting Test

Motor Functions

Grip Strength

Finger Tapping Test

Mood/Behavior

Dementia Severity Rating Scale

Activities of Daily Living Scale

Neuropsychiatric Inventory – Questionnaire

Perceived Deficits Questionnaire

Patient Health Questionnaire – 9

Generalized Anxiety Disorder Questionnaire – 7

Identifying Information:

The following information comes from a clinical interview with Mr. Lewally and his wife, as well as a review of available medical records. Mr. Lewally is a 74-year-old, right-handed, married African male with 16 years of education.

Presenting Problems: Mr. Lewally reported having problems with verbal expression. He said that he has difficulty thinking of words when speaking. He tends to lose his train of thought as well. His wife added that he occasionally forgets information told to him and needs reminders. He tends to repeat himself without realizing it. She added that he has difficulty keeping track of dates, which has led to missed appointments and social engagements. These problems developed one year ago and have gradually worsened over time.

Mr. Lewally acknowledged feeling anxious. He often worries, feels restless, and has trouble relaxing. His wife stated that she has observed increased sadness as well. "He used to be very active and outgoing," she said. His appetite is stable, though he has unintentionally lost approximately 5-10 pounds over the last three months. He has difficulty initiating and maintaining sleep. His energy level is significantly reduced. He reported that his sleep includes occasional motor movements (e.g., jumping out of bed) and vocalizations. He denied suicidal ideation. There have been no apparent psychotic features.

He limits his driving to local destinations due to decreased visual acuity, particularly at night. He denied any instances of becoming lost or confused on the road, as well as any recent auto accidents. He manages his medications independently and reportedly without error. However, his wife reported that he has forgotten to make several bill payments. His ability to perform activities of daily living is otherwise reportedly unchanged from his baseline.

Medical History: He has cardiac arrhythmia, diabetes, hypertension, hyperlipidemia, and untreated sleep apnea.

A CT scan of the brain (11/2021) reported no acute intracranial process. Findings most compatible with chronic small vessel ischemic changes were noted.

Surgeries: left cardiac catheterization, cystoscopy, cystourethroscopy with ureteral catheterization, upper GI endoscopy, and colonoscopy.

Current medications: Janumet, amlodipine, and atorvastatin.

Substance use: He denied a history of alcohol, nicotine, and recreational drug use.

Family history: There is no known family history of dementia. His mother had Parkinson's disease and died at 79. His father had hypertension and died at 84 from causes unknown to him. He has four brothers and two sisters. Two of his brothers died from lung cancer. The remainder of his siblings are reportedly healthy.

Mental Health History: About one year ago, his primary care physician prescribed mirtazapine for insomnia, though Mr. Lewally reportedly never took it. He otherwise denied a history of mental health treatment.

Educational History: Mr. Lewally completed a bachelor's degree in microbiology at Texas Southern University. He reported earning an A-B average in school.

Occupational History: He worked as a microbiologist for the City of Houston. He retired 10 years ago.

Social History: Mr. Lewally was born in Sierra Leone. Krio is his native language. He began learning English as a second language upon starting school. He has been married for five years. He lives with his wife. He was married and divorced twice previously. He has one son and one daughter from his first marriage.

Behavioral Observations:

Mr. Lewally presented as a nicely dressed, well-groomed gentleman. He ambulated independently and wore prescription glasses. Mood was pleasant, though mildly anxious. Affect ranged from broad to restricted. His speech featured a Sierra Leonean accent and was commensurate with his language learning history. He knew the city but not the testing location. He was otherwise oriented to time, person, and situation. During the test session, the examiner had to provide frequent elaboration and simplification, as well as occasional repetition, of test

instructions. With such support, Mr. Lewally understood all test instructions adequately. He was cooperative. Results appear to provide an accurate representation of his current level of neuropsychological functioning.

Results:

Intellectual: Mr. Lewally obtained a Full Scale IQ of 70, which falls within the below average range. Across ability domains, Verbal Comprehension (81) was low average but Perceptual Reasoning (63) was exceptionally low. On specific subtests, oral expression of word meanings was average. In contrast, abstract verbal reasoning was below average. Construction of abstract block designs was exceptionally low. Visual pattern analysis was below average.

Language: Auditory comprehension of commands varying in syntactic complexity was exceptionally low. Visual object naming was exceptionally low as well. Controlled oral verbal fluency was exceptionally low to both phonemic and semantic criteria. Oral word reading was average, however.

Visuospatial/Constructional: A measure of visuospatial judgment was discontinued after he made too many errors on the sample items; his performance was considered exceptionally low. His copy of a complex geometric design was exceptionally low as well.

Attention: Immediate recall of orally presented number sequences was average in forward order but below average in reverse order. A measure of speed of visuoperceptual scanning and discrimination was discontinued after he was unable to comprehend the test instructions. Speed of digit symbol association and transcription was exceptionally low.

Learning and Memory: Immediate recall of unstructured verbal material (12-word list) was below average for total word recall across three trials (2, 5, and 7 words, respectively). After a 25-minute delay, he was able to recall 3 words from the list, which is exceptionally low in relation to his level of immediate recall (43% savings). Delayed word recognition was low average, however (10 hits, 2 false positives).

Immediate recall of structured verbal material (stories) was below average. Delayed (30-minute) recall of the same stories was exceptionally low. Delayed recognition of story elements was below average.

Immediate recall of geometric figures was exceptionally low. Delayed (30-minute) recall of the same figures was below average. Delayed figural recognition was below average as well.

Executive Functions: Speed of visual-graphomotor tracking was exceptionally low for a simple (numerical order) sequence as well as a complex (alternating number-color) sequence. He made three errors on the complex sequence and was unable to complete it within the time limit. Performance on a novel card sorting test requiring rule learning and strategy modification in response to feedback was exceptionally low for the ability to establish set and below average for the ability to shift set.

Motor Functions: Grip strength was below average in the right hand and exceptionally low in the left hand. Fine motor speed (index finger tapping) was exceptionally low bilaterally.

Mood/Behavior: His self-report of depressive symptoms fell within the moderate range, which primarily reflected insomnia, anergia, and trouble concentrating, rather than negative mood. His self-report of anxiety symptoms also fell within the moderate range.

Impression: Dementia of the Alzheimer's Type, Mild Severity
Adjustment Disorder with Anxiety

Mr. Lewally's neuropsychological evaluation revealed moderate impairments in auditory comprehension, object naming, verbal fluency, semantic fluency, visuospatial/constructional skills, processing speed, verbal memory, visual memory, executive functions, fine motor speed (bilaterally), and grip strength (left hand). Mild impairments were evident in visual pattern analysis, working memory, and grip strength (right hand). During the test session, the examiner had to provide frequent elaboration and simplification, as well as occasional repetition of test instructions.

In contrast, he demonstrated relatively well-preserved word reading, expressive vocabulary, auditory attention, and recognition memory for a word list. He knew the city but not the testing location. He was otherwise oriented to time, person, and situation.

His self-report of depressive symptoms fell within the moderate range, which primarily reflected insomnia, anergia, and trouble concentrating, rather than negative mood. His self-report of anxiety symptoms fell within the moderate range. His wife added that she has observed increased sadness.

Mr. Lewally's history and current test data reveal multiple cognitive impairments that represent a significant decline from his estimated premorbid level, which correlate with difficulty performing some instrumental activities of daily living independently. A diagnosis of mild dementia is warranted. Impairments in receptive and expressive language, visuospatial/constructional skills, processing speed, verbal memory, visual memory, executive functions, fine motor speed, and grip strength are all salient findings. Unfortunately, Alzheimer's disease appears to be the most likely etiology. The possibility of a comorbid cerebrovascular contribution to his dementia cannot be entirely excluded, but AD appears to be the primary etiology.

Recommendations:

1. Mr. Lewally appears to be a good candidate for pharmacologic treatment of his mild dementia and mood disturbance.
2. Important information should be communicated only in the presence of a family member or trusted associate. Mr. Lewally's comprehension and retention of information should not be assumed in any conversation or other communication. Someone should accompany him to all medical appointments and meetings at which important decisions will be made. He would benefit from assistance with complex decision-making.

3. Oversight of his medications, finances, and all personal affairs would be prudent. The probable progressive nature of his dementia implies a need to plan in terms of his living situation and future health care needs. Preliminary consideration of in-home healthcare services or assisted living options is recommended.
4. His impairments in processing speed, visual memory, and executive functions raise serious concerns about his driving safety. Cessation of driving is recommended. Further details may be obtained through a driving evaluation. One is available from Strowmatt Rehabilitation Services (713-722-0667 or driverrehabservices.com).
5. He should be encouraged to follow up with a sleep specialist to initiate treatment for his sleep apnea.
6. Regular physical exercise is recommended for its beneficial effects on brain health, mood, and cognitive maintenance.
7. It will be important for the patient to have opportunities to socialize with others. He may also enjoy nostalgia-oriented materials for recreational purposes (e.g., old movies and music). Although he will have difficulty following new movies and programs, he may enjoy listening to those with which he is already familiar.
8. The Alzheimer's Association (www.alz.org/texas) provides useful information and resources for family members of AD patients. His family members might benefit from enrollment in a support group for caregivers of persons with dementia.

Dr. Thomas, thank you for this kind referral. If we may be of further assistance, please do not hesitate to contact us.

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Electronically signed: 3/17/26.