Assessment and Intervention Traumatic Brain Injury

Assessment

- Clinical Interview
- Flexible neuropsychological battery (see attached)

Intervention

- Education about emotional, cognitive, and behavioral impacts of TBI
- Behavioral interventions
    - Sleep/fatigue (e.g., sleep hygiene, cognitive behavioral therapy for insomnia, pacing, relaxation)
    - Basic Relaxation Strategies Teaching – diaphragmatic breathing, mindfulness meditation, guided imagery, progressive muscle relaxation
    - Awareness training
    - Health and behavior intervention to improve nutrition, hydration, exercise
- Cognitive Behavioral Therapy
- Motivational Interviewing
- Evidence-based cognitive rehabilitation
- Collaborative interventions (family, rehab team, community) to promote community re-integration

Resources

For Patients

Brain Injury Association of America. http://www.biausa.org/

Traumatic Brain Injury: A Guide for Patients – VA Mental Health.
https://www.mentalhealth.va.gov/docs/tbi.pdf

Model Systems Knowledge Translation center. Traumatic brain injury factsheets.
http://www.msktc.org/tbi/factsheets

Brain Injury Resource Center. www.headinjury.com

Brainline – All about brain injury and PTSD. www.brainline.org

Family Caregiving Alliance – National Center on Caregiving. https://www.caregiver.org/traumatic-brain-injury

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Neuropsychological Assessment Test List – Core Battery

Estimates of Preinjury Functioning	
TOPF	
WRAT-IV Reading	
WAIS-IV Vocabulary	
WAIS-IV Information	
Global Measures	
DRS-2 WASI	
Motor Functioning	
Grooved Pegboard	
Tapping	
Hand Dynamometer	
Language	
BNT VNT	
MAE Token Test	
BDAE Comprehension	
BDAE Repetition	
WRAT-IV Sent. Comprehension	
TORC 3 – Paragraph Reading	
Learning & Memory	
CVLT-2 HVLT RAVLT	
WMS-IV Log Mem. I , II, Recog	
Instructions Recall Task	
RCFT 3-min delay	
RCFT 30-min delay/Recognition	
Brief Visual Memory Test	
Visuospatial/Perceptual	
RCFT copy	
WAIS-IV Block Design	
WAIS-IV Visual Puzzles	
HVOT	
JOLO	
Mesulam Line Bisection	
R-L Orientation (Culver)	
Attention & Executive Functioning	
FAS/Category Fluency	
Trails A&B DKEFS Trails	
WAIS-IV Digit Span	
WAIS-IV L-N Sequencing	
WAIS-IV Arithmetic	
WAIS-IV Coding SDMT	
WAIS-IV Symbol Search	
Stroop (Golden)	
Tower of London DKEFS Tower	
DKEFS Sorting	
WAIS-IV Similarities	
WAIS-IV Matrix Reasoning	
WAIS-IV Figure Weights	
WCST Booklet Category	
ACT PASAT	
Symptom Validity	
WMT (full)	
TOMM	
Reliable Digit Span CVLT forced	
Rey 15-item with recog.	
Psychological & Emotional Functioning	
FSS GAD-7	
BDI-II PHQ-9 GDS	
Fatigue Impact	
PAI	
EDSS	
Survey and consent	

Behavioral Observations

Gait/motor

Language (expressive/receptive)

Speech

Thinking

Attention

Emotional response/affect

Motivation/effort

Consider:

Affective lability	Anger, irritability	Verbal perseveration
Restricted affect	Reduced frust. tolerance	Reduced intelligibility
Inappropriate affect	Reduced motivation	Impaired language compreh.
Depressed mood	Poor grooming,	Word finding difficulty
Self-criticism	Lethargy	Verbal expansiveness
Anxiety, worry	Hygiene	Tangential thinking
Somatic concern	Psychomotor retardation	Inattention, distraction
Motor perseveration	Long response latencies	

FACTORS AFFECTING TEST ADMINISTRATION:

Impaired vision	Impaired comprehension	Left/right paralysis
Impaired hearing	Impaired verbal expression	

CONSULT

REHABILITATION PSYCHOLOGY AND NEUROPSYCHOLOGY

Reason for Consult:
Diagnostic Interview
Neuropsychological examination

Consult requested by
Tracy Friedlander, M.D.

HISTORY

History of Present Illness
Ms. XXX is a 93 year-old female with a history of HTN, TIA (2014), neuropathy, hypothyroidism, glaucoma, and macular degeneration. She is now 6 days post-admit after falling in her driveway, hitting her head without LOC, and right hip pain. She was found to have right pubic root and sacral ala fractures. CT revealed a 6 mm right frontal lobe hemorrhage in the subcortical white matter adjacent to the right frontal horn.

Mental Health and Substance Abuse History
She reported no history of substance abuse problems. She reported a history of sadness which lasted intermittently for approximately 2 years following the deaths of each of her 2 husbands. She reported no other history of mental health problems.

Social History
Ms. XXX reported completing high school. She did not repeat any years of school, and did not receive special education services. She has worked as a secretary and retired at age 57. She is widowed, and has 1 son.

MAJOR FINDINGS

BEHAVIORAL OBSERVATIONS
Ms. XXX was examined in her hospital room. She was of tall stature and moderate weight. She wore eyeglasses, but did not use any other orthotic or prosthetic devices. She was appropriately dressed and groomed. There were no apparent difficulties with vision. She was hard of hearing and required that the provider speak in a loud volume for conversation. Her speech was intelligible, normal in rate, normal in rhythm, and appropriate in content.

SENSORY AND MOTOR FUNCTIONING
She demonstrated full extra-ocular movements and visual fields. Gaze tracking was smooth, without loss of pursuit. Bilateral grip strength was grossly normal. Bilateral fine-motor coordination was grossly normal. Bilateral localization of touch grossly intact. There was no evidence of apraxia or ataxia.

COGNITIVE STATUS
She was alert and appropriately responsive. She responded appropriately to simple questions and requests. She reported a 2 year history of progressive memory difficulties. She reported none/momentary retrograde amnesia, and anterograde amnesia of less than 30 minutes (likely less than 10 minutes).

Overall, her cognitive functioning was mildly impaired. She was oriented to year, season, ,month, day of the week and time of day, but she did not know the date. She required choices to correctly identify the place. She had intact memory for recent events. Simple and complex attention were borderline to mildly impaired. Language processing showed no difficulties with receptive language, expressive language, and repetition. Visual-spatial processing demonstrated moderate organizational difficulties with draw-to-command (clock drawing) but no perceptual-constructional difficulties with draw-to-copy. Memory was mildly impaired for recall and recognition, but improved with forced choice. Reasoning and problem solving for structured situations were grossly intact.

MOOD / AFFECT / ADJUSTMENT
She denied feeling sad, anxious, or irritable. She reported usual pleasure and enjoyment. Mood was normal. Affect was normal in range and intensity. There was no evidence of hallucinations, delusions, or other psychotic processes. Her thoughts appeared normal in rate and linkage. Sleep and appetite were described as good.

SUBSTANCE USE
She reported no use of alcohol or illicit drugs.

ASSESSMENTS

These findings indicate mildly impaired overall cognitive functioning, with mild deficits in the areas of memory, attention, naming, and executive organization. This is consistent with generalized cerebral dysfunction and focal frontal lobe dysfunction. Coping and adjustment appear positive.

DIAGNOSES

S06.360A Traumatic hemorrhage of cerebrum, unspecified, without loss of consciousness
F43.20 Adjustment reaction to medical treatment

PLANS / RECOMMENDATIONS

a. She has difficulties with attention, and so distractions should be limited during therapies, and information should be presented in short, focused units.
b. She has difficulties with memory, and so information should be repeated, and cues should be provided to help with memory retrieval. She may benefit from a memory book. Important information should also be communicated to her family.

c. She may require intermittent supervision after discharge for complex task management, but she has appropriate capacity for decision-making.

ATTENDING NOTE

I reviewed the history, and personally interviewed the patient. The recommendations are based on my assessment. 90791

In regard to the neuropsychological testing, I spent _2 hour(s) seeing the patient, conducting the exam, interpreting the results, formulating the conclusions and recommendations, and preparing the report. 96118 = __2 hour(s)

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