Background for NavNeuro Fact-Finding Case 1

Note: Do not look at this document or the accompanying datasheet if you want to practice the fact find. Either have a partner be the examiner (in which case they will use this document to answer questions you ask) or listen to the episode prior to looking at this document.

Identifying Information

Age: 50
Sex: Female
Handedness: R
Education: 16
Race/ethnicity: White

Reason for Referral

Ms. X was referred by Dr. X, (Physical Medicine & Rehabilitation) for a baseline neuropsychological evaluation due to concerns regarding cognitive impairment. The purpose of this evaluation was to assess current neurocognitive functioning, assist with differential diagnosis, and provide recommendations to aid her healthcare team with treatment planning.

Review of Medical Records

Note: You [the examiner] should withhold this information until later in the case, after presenting the cognitive data and getting the examinee's impressions.

Per Discharge Summary [from acute unit], Ms. X experienced a right frontal cerebral hemorrhage secondary to a ruptured arteriovenous malformation (AVM), with associated brain compression and mass effect. She is status post craniotomy for hematoma evacuation and AVM resection. Other diagnoses included encephalopathy, pneumonia, hypertension, hyperlipidemia, dysphagia, and hypernatremia.

Per ST eval [~1 month after event], she required partial/moderate assistance (40% cues) for comprehension, expression, and social interactions. She required substantial assistance (75% cues) for memory and problem solving.

Per ST eval [~2 months after event], she required partial/moderate assistance (20% cues) for comprehension, expression, and social interactions. She required 35% cues for memory and 45% cues for problem solving.

Neuroimaging:

Per MRI Brain Impression [from immediately after event]:
"There are areas of ischemia/acute infarct in the right frontal lobe surrounding the hemorrhage. There are also acute infarcts involving the left frontal lobe, corpus callosum, left basal ganglia, right thalamus, bilateral occipital lobes, and right mesial temporal lobe."

Per CT Head Findings [from ~1 month after the event]:
"Intracranial hemorrhage: Mild residual patchy hemorrhage along the medial right frontal lobe and, nearly resolved since prior examination. Trace residual intraventricular hemorrhage, also nearly resolved. No new focus of hemorrhage.
Cerebrum: Evolving infarct along the right anterior cerebral artery territory, stable in extent. No new focus of infarct."

History of Presenting Illness

Patient's report:
Ms. X experienced an AVM rupture on [date] with resulting hemorrhage. She received inpatient rehab (ST, OT, PT) and was home in [~2 months after event]. She said that she made significant progress and that she "feels great," adding that she does not notice any ongoing cognitive issues.

Sisters' report:
Both of her sisters noted that she has made significant improvements in physical, cognitive, and functional abilities, estimating that she is 90-95% back to her cognitive baseline. However, they continue to notice mild short-term memory issues (e.g., that she sometimes repeats herself), impulse control difficulties (e.g., she rushes through tasks), and distractibility. They also commented that she is less health-conscious (e.g., she eats more sweets and junk food than prior to the AVM rupture). She also sometimes rubs her leg or gently rocks in a perseverative manner.

Functional Status

Ms. X is reportedly independent for basic activities of daily living (ADLs). In terms of instrumental ADLs, most of her finances are on autopay; she manages some financial activities without much difficulty, although she occasionally makes a mistake balancing her checkbook (her sister double checks these activities). She manages her medications but her sister oversees the weekly pill box filling process; she has watch alarms to prompt her to take her medications, but she still occasionally forgets. She is capable of handling household chores (e.g., cooking, laundry, cleaning). She is adept at using technology. She has not driven since her

hospitalization. She wants to resume driving, and also wants to live on her own. Her sisters voiced some concern about her resuming these activities prematurely.

Relevant Medical History (not referenced above)

- She has a long-standing history of hypertension and hyperlipidemia which had been uncontrolled prior to her hospitalization
- Her sister reported subtle, occasional balance issues
- Denied any history of cardiac issues, head injuries, or seizures; she never had a prior stroke
- Denied pain, dysphagia, falls, incontinence, or changes in smell/taste

---

Psychiatric History/Status

Ms. X denied any history of formal psychiatric diagnosis or treatment; however, she said that she experienced relatively normal ups and downs in her mood, mostly related to her stressful job.

Current status:
Mood: Per her report: "Pretty good," although mood has been affected by the pandemic. Her sisters agreed that her mood is overall positive. One sister said that she is occasionally more irritable but the other said that she is overall more calm than she was pre-AVM rupture.
Suicidal/Homicidal Ideation: She denied SI and HI. Auditory/Visual Hallucinations: Denied.
Personality/behavior: She and her sisters denied noticing any uncharacteristic behavior or drastic personality changes, aside from being less health-conscious (e.g., eating more sweets and unhealthy foods; her sisters said that she has gained ~50 pounds over the past year).

Sleep

- She said that she sleeps well and gets 8+ hours per night. She generally feels rested.
- She believes that she snores but has never had a sleep study and does not know if she has apnea (her sisters were uncertain)
- She denied REM behavior symptoms

Medication

Per list provided by Ms. X:
1. Ferrous sulfate
2. Amlodipine
3. Magnesium chloride
4. Metoprolol

5. Ezetimibe
6. Simvastatin

She also listed several supplements such as a multivitamin, glucosamine chondroitin, and coq10.

Developmental/Educational/Occupational History

- Normal developmental history
- She was born and raised on the West Coast, USA
- She completed a bachelor's degree
- She said that she was an average student and denied any attentional problems or learning disability
- Occupation: She worked as a manager up until the day that her AVM ruptured; she is interested in returning to work as soon as possible; she currently receives disability and is in the process of applying for SSDI

Social History/Substance Use

- Never married and does not have children
- Has lived with her parents since returning from the hospital; she was previously living on her own
- She spends much of her time on the computer or watching television; she has been less socially and physically active due to the pandemic
- Substance use: She has not consumed alcohol since her hospitalization and denied any history of problematic use. She denied current or past use of illicit substances. She does not use tobacco products.

Family History

- She denied any known family history of neurocognitive issues

---

Behavioral Observations

Arrival: Ms. X arrived early and was accompanied by her sister (she drove the patient). Her other sister picked her up at the end of the session. Appearance: She was appropriately dressed, well-groomed, and in no acute distress. Demeanor: She was open, honest, and friendly. Rapport was easily established. I found her to be an accurate historian; she had a good understanding of her medical history. Attention: Alert and attentive in conversation. Motor: She ambulated independently. Ambulation was somewhat slow but otherwise

unremarkable (although not formally assessed). No tremor or other involuntary movements were observed or reported, although she made very subtle rocking motions on occasion. Speech: She was soft-spoken for most of the session, but her sisters said this is her baseline. Receptive and expressive language abilities were otherwise normal in conversation. Sensory: Hearing and vision (corrected with glasses) appeared adequate for testing purposes. Thought Process/Content: There was no evidence of disordered thinking. Affect: Positive, with an appropriate range. Test Specific Observations: Ms. X approached tests in a straightforward fashion and grasped task demands. She commented that she had seen some of these measures (in some form) during her speech therapy sessions. She benefited somewhat from encouragement on difficult measures. She demonstrated good mental stamina and only required one brief bathroom break during testing. See the Table below for more test-specific observations. Performance Validity: Within normal limits.