1. A 55-year-old executive has noticed a steadily worsening memory and multitasking problems at work. He also reports daily holocephalic headaches not associated with vision impairment or photophonophobia. He replied "yes" to a daytime sleepiness questionnaire. He has gained 40 pounds in the last 10 years and is unable to exercise sufficiently because of work constraints. He does not smoke, but, to relax in the evening, he habitually drinks 2-3 shots of whiskey and thereafter 2 or 3 beers. Examination, apart from a BMI of 31.5, was normal in all respects from a cardiovascular, cerebrovascular general medical and general neurological point of view. Cognitive metric testing with the RBANS revealed abnormally low immediate memory scores.

Multimodality MRI imaging was normal in all respects and this included MRA of the intracranial and neck vessels. All cardiovascular blood tests were normal. Because of a diagnostic quandary he was referred to a cardiologist who found no abnormality. During the cardiac evaluation, he was asked specifically about dyspnea and snoring, the latter to which he replied affirmatively. A polysomnogram arranged by a pulmonologist revealed significant sleep apnea syndrome. He was advised to curtail alcohol & lose weight, and to get him going BIPAP was administered with marked relief in his headache, tiredness and energy levels improved. At 3 months follow up, memory testing with the RBANS normalized and he no longer had any difficulties in multitasking at work.

Does the patient have early cognitive impairment characteristic of a dementia syndrome?

A. *Maybe, but will need to do a CSF analysis and PET scan first*
B. *As all his clinical and paraclinical findings have normalized sleep apnea syndrome and related headache, memory loss and dysexecutive syndrome is most likely*
C. *This is probably alcohol related amnesia, hangover headache and early liver failure*

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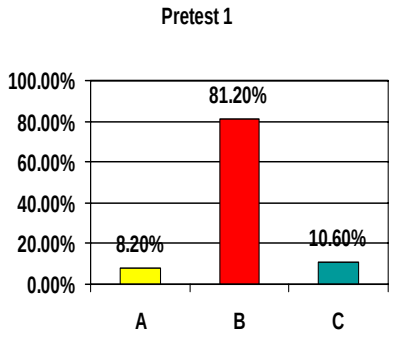

2. A 61-year-old African-American male with a history of hypertension and diabetes II is seen in our office due to complaints of increasing forgetfulness. He is accompanied by his wife, whom reports the patient seems more forgetful this past year, but has not affected his activities at work or at home. She notices he misplaces personal items and has forgotten to take his medication more often the past 3 months. Family medical history is positive for dementia, his paternal uncle and aunt developing in their 70s. Medical history is otherwise unremarkable. Psychiatric history is positive for depression in his 20s, treated successfully. He was a good student and completed an AS degree in engineering. He is working full-time as an engineering technician and is doing well at work. The patient was AAOX4. Speech was generally fluent and articulate. He had some mild word finding problems. Gait was WNL. There was no pronounced tremor. Attention, memory for recent and remote historical events, speech, along with insight and judgment appeared intact. Mood was somewhat anxious and affect was full. He denied SI/HI plan or intent. There were no hallucinations or delusions.

Basic labs are normal. MRI study done 3 months ago by a primary care physician was read and unremarkable. There were some mild periventricular white matter changes. He denies depression is affecting him.

Based on the evaluation above, how might neuropsychological evaluation be helpful in this case?

A. *Identify if brain dysfunction or psychiatric dysfunction accounts for the patient's complaints*
B. *Assist to determine if patient meets diagnostic criteria for mild cognitive impairment (MCI)*
C. *Provide a baseline to track potential changes in neuropsychological functioning over time*
D. *All of the above*

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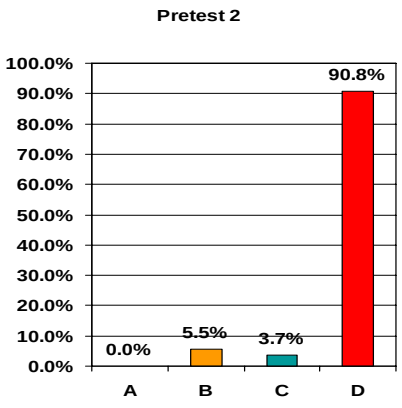

3. You have been concerned recently about some 'strange' responses exhibited by two of your patients with a history of major depression for whom you have prescribed SSRIs. Although these individuals had a good therapeutic response, they both exhibited marked adverse reactions to paroxetine at the dose prescribed. You remember reading something about P450 polymorphisms affecting both therapeutic responses and adverse reactions to the antidepressants, and decide to request a screen for P450 polymorphisms. Results indicate that both patients had two null alleles for CYP2D6.

How do you interpret these results and what effect do they have on your decision as how to proceed with pharmacological treatment?

A. The presence of the 2 null alleles indicates these individuals are extensive metabolizers; increase the dose of paroxetine by 50%
B. The presence of the 2 null alleles doesn't mean anything; keep the patients on their current dose for a longer period of time waiting for tolerance to the side effects to develop
C. The presence of the 2 null alleles indicates these individuals are poor metabolizers; decrease the dose of paroxetine by 30-60%

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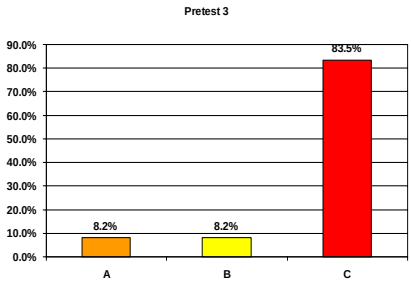

4. A 65-year-old female with a medical history significant for Stage II B Breast Cancer, 2/10 lymph nodes positive, reports 4 weeks of depressed mood, poor sleep, increased appetite, lack of interest in daily activities, hopelessness, worthlessness, and a sense of exaggerated guilt involving her breast cancer diagnosis. She reports that she has a very supportive family and friends. She used to be very active and feels that she can no longer ignore her symptoms and is interested in starting an antidepressant. She has completed her 4 AC treatments and has just received the first of her 4 paclitaxel treatments. She denies any ETOH or illicit drug use. What antidepressant would you consider for this psychotropic naïve patient?

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B. Fluoxetine

C. Nortriptyline

D. Sertaline

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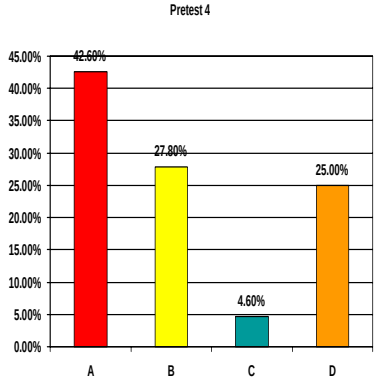

5. In late August, the community of Blue Waters was hit by a devastating hurricane that destroyed homes and property. John, a 74-year-old Caucasian male, was forced to move from his home where he had lived for the past 30 years after his roof collapsed and extensive flooding resulted in significant structural damage. He now lives in a FEMA trailer community.

At the suggestion of his minister, John has made an appointment to meet with his primary care physician because he is having "difficulties with sleep since the storm." He feels isolated from his neighbors and frustrated with FEMA and his insurance company because they are so slow in responding to his needs. His clothing appears to be stained and he smells faintly of alcohol. When asked about his appearance, he reports that it is difficult to do laundry because "bad kids" hang out in the facility and hassle people in the area.

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Which of the questions below does NOT need to be asked during the clinical interview with John?

A. *Have you felt so badly, you have considered taking your life?*
B. *What was it like being in the hurricane?*
C. *Do you have any close friends or neighbors in the area?*
D. *What is keeping you going (alive) each day?*

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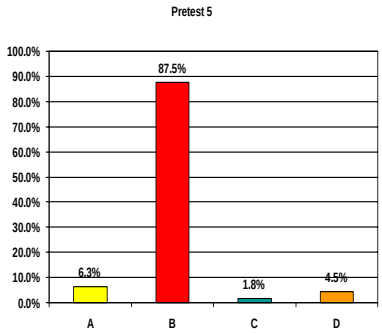

6. Ms. P is a 73-year-old female who lives with her husband of 52 years in their suburban home. Her husband was active duty Navy for 23 years and they travelled extensively. All her life, she has maintained extensive collections of sentimental artifacts. Since her husband retired 15 years ago, they have moved into their retirement home. In the past 10 years, her collection has gotten steadily larger, resulting in extensive severe clutter in the home. The house is a 3 bedroom 2 bathroom rambler. Currently, they are able to access only the kitchen, a small portion of the front room and one bathroom.

She has agreed to see you only at the insistence of her daughter who is concerned because the patient sleeps in a recliner and the husband sleeps on the floor near the recliner because they have no access to any other furniture inside the home. The daughter requests medications for her mother and informs you of her plans to have all of the collected possessions removed. She then asks you "Do you think it will work?"

The best answer would be:

A. Emphatic yes, as forced clearing is beneficial and the effects are long lasting.
B. Emphatic no, as forced clearing never works.
C. Maybe. Less than half hoarders maintain clutter-free environments long term.

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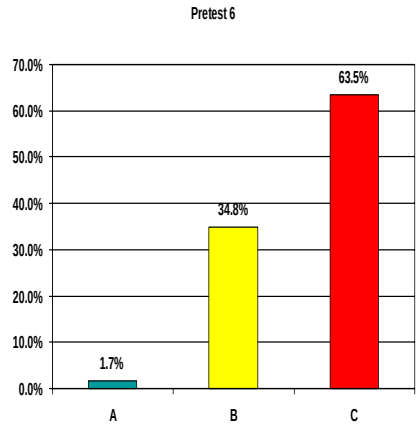

7. A 77-year old previously healthy woman in your primary care practice comes to your office for a routine medical examination. She feels well, has no complaints, and remains active. During a routine functional inquiry, you inquire whether she feels she has any difficulty hearing. She states that her husband occasionally complains that she is not hearing him very well. Upon further questioning, she also reports that she sometimes has difficulty understanding people at work. In social situations, she often has to ask others to repeat themselves.

What would you do next?

A. *Administer a tuning fork test.*
B. *Nothing. Hearing loss is a normal part of aging and there are no effective interventions.*
C. *Refer to an otolaryngologist or audiologist for further evaluation.*
D. *Schedule the patient for recall in 6 months to determine if there are changes in hearing.*

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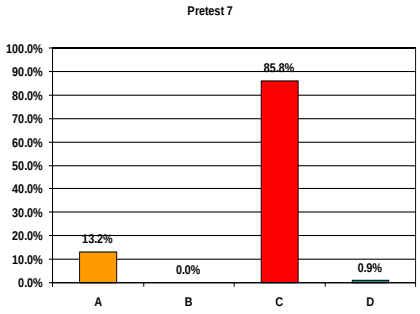

8. A 72-year-old white, widowed male presents to ER with severe respiratory depression, miosis, mild hypotension, and bradycardia. Drug screen is negative, but urainalysis reports chromaturia with blue-green urine. There is no history of traumatic brain injury, epilepsy, tricyclic antidepressant use, or increased intracranial pressure. Airway is secured, gastric lavage is performed, and multidose activated charcoal is initiated. Flumazenil 0.2 mg/min is used (up to 2 mg total) and patient becomes extremely agitated and combative.

The reaction to flumazenil is indicative of which of the following?

A. Presence of intracranial pathology
B. Need for hemodialysis or hemoperfusion
C. Whole bowel irrigation
D. Long-term use of benzodiazepine receptor agonists

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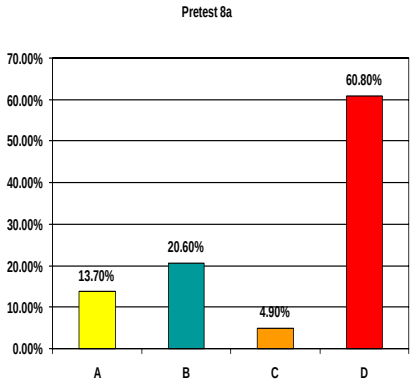

8b. The most likely substance responsible for the clinical findings above is which of the following?

A. Phenobarbital
B. GHB
C. Chloral hydrate
D. Zaleplon

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