



COMLEX Level 2 PE Exam

**A 87 yrs old woman came to clinic on concern
of Memory Loss**



Patient Data Sheet

- **Patient Name:** Ms. Delaney
- **Clinical Settings:** Family Medicine Office
- **CC:** A 87 years old female presents with memory loss.

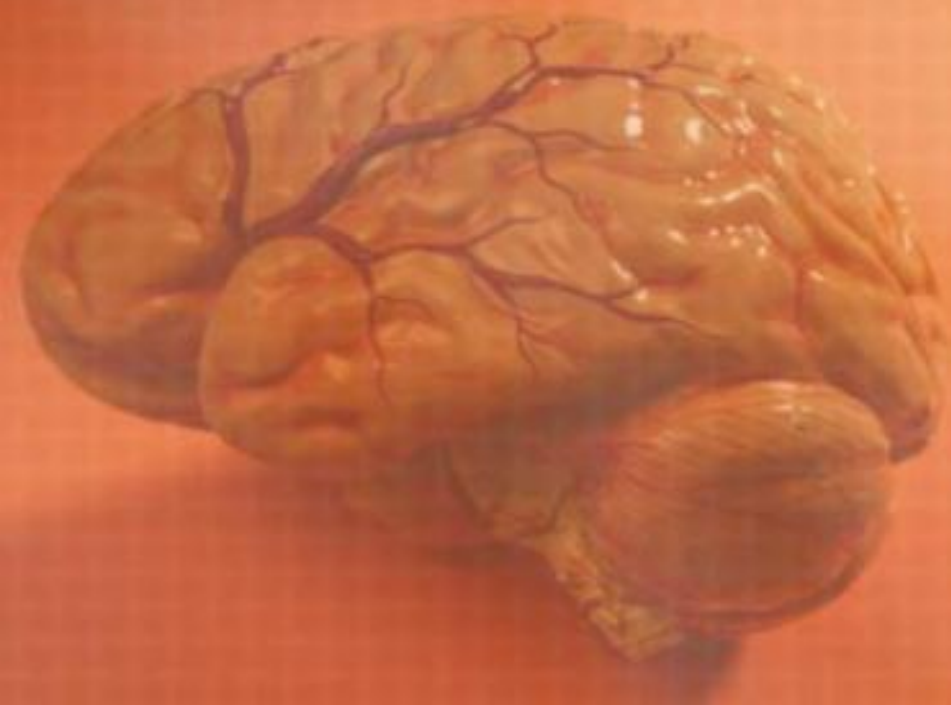
Vital Signs:

- **Blood Pressure :** 134/78 mm Hg
- **Temperature :** 99.0 °F
- **Pulse :** 70 bpm, irregular
- **Height :** 64 inches
- **Weight :** 127 lbs.
- **BMI :** 21.8 kg/m²



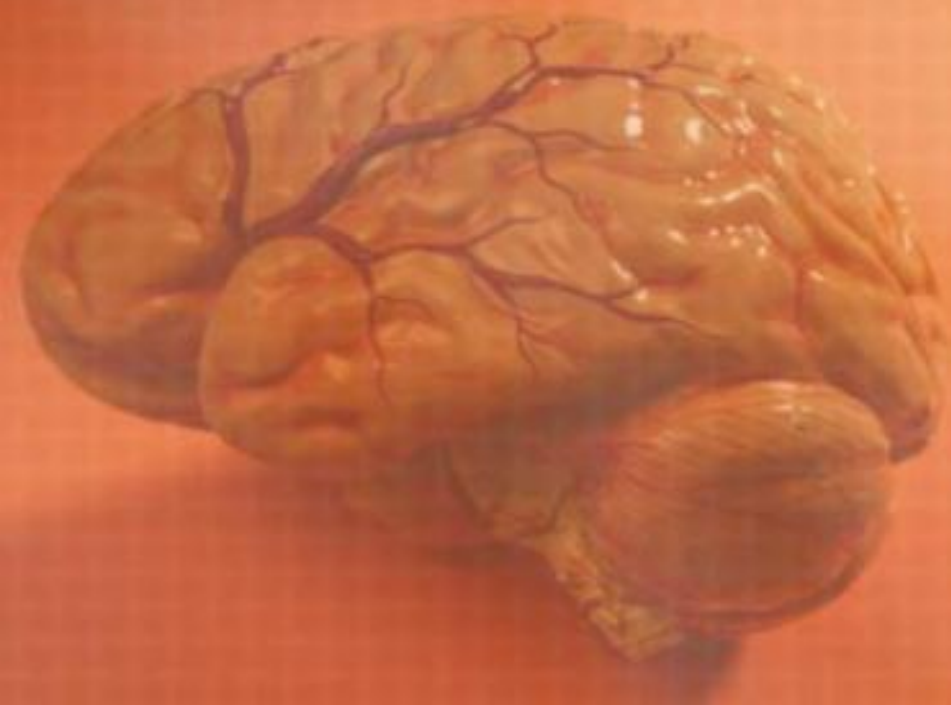
Differential Diagnosis:

1. Alzheimer's disease.
2. Pseudodementia: Memory loss secondary to depression/ other psychiatric causes.
3. Vascular dementia - TIAs (multiple, over time), evolving Stroke.
4. Vitamin B12 deficiency- SACD.
5. Metabolic causes of dementia.
6. Medical conditions causing "pseudo dementia": rule out delirium.
7. Lewy Body dementia.
8. Normal pressure hydrocephalus (NPH).
9. Subdural hematoma (SDH)--chronic or sub₃ acute.



Key points to remember: before you enter the room

- The patient may not be able to provide adequate history. They may be angry or emotionally labile. DO NOT TAKE IT PERSONALLY.
- The best history may be obtained from their care-provider/ family/ friend-- focus on that.
- Always rule out metabolic causes--do a thorough head to toe exam.
- Polypharmacy is the culprit in many patients--make sure to obtain list of all medications.
- Do not miss assessing for psychiatric conditions.



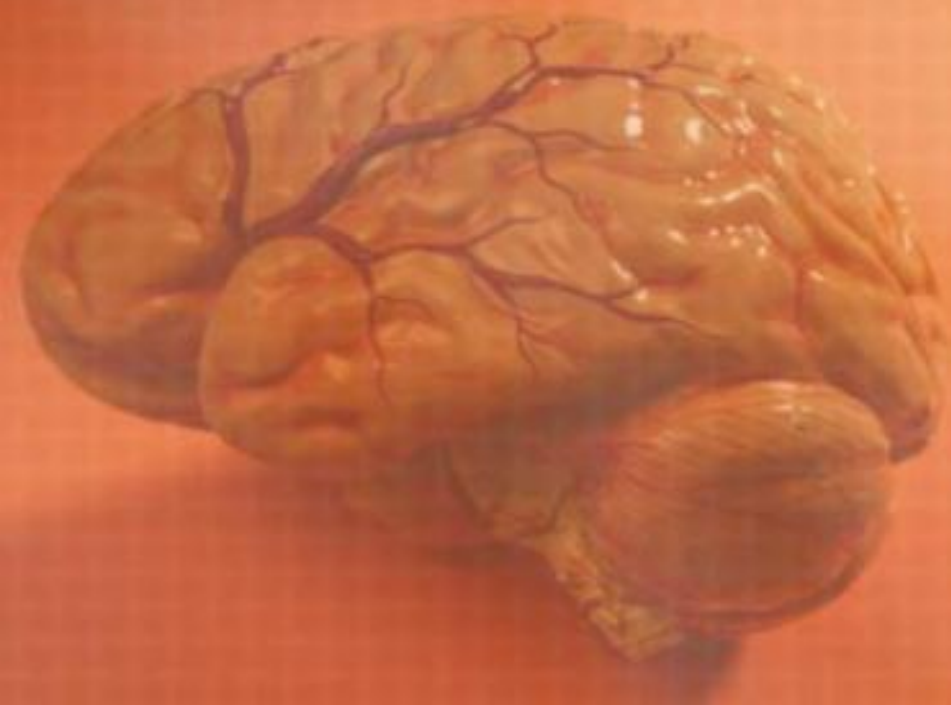
Opening Scenario

- An elderly woman sitting on the chair, accompanied by her daughter.
- Other family members can be reached by phone.
- There may be a file or sheet with the list of her medical problems and current medications.



Subjective

- Introduce yourself to everyone present in the room.
- Make eye contact and shake hands with the patient. Assess if they are oriented and capable of providing reliable history. Reassure if they are sad or depressed.
- If patient can provide history, ask her. Else ask family or neighbor or friend who brought her in. In this case, you can ask to her daughter.
- What happened? When did it start ?
- Has she been getting progressively worse for some weeks or months?
- Has she lost her way ? lost things ? lost keys? locked herself out? Behaved strangely ? Been a hazard to herself or someone else ?
- Does she need help with ADL ?



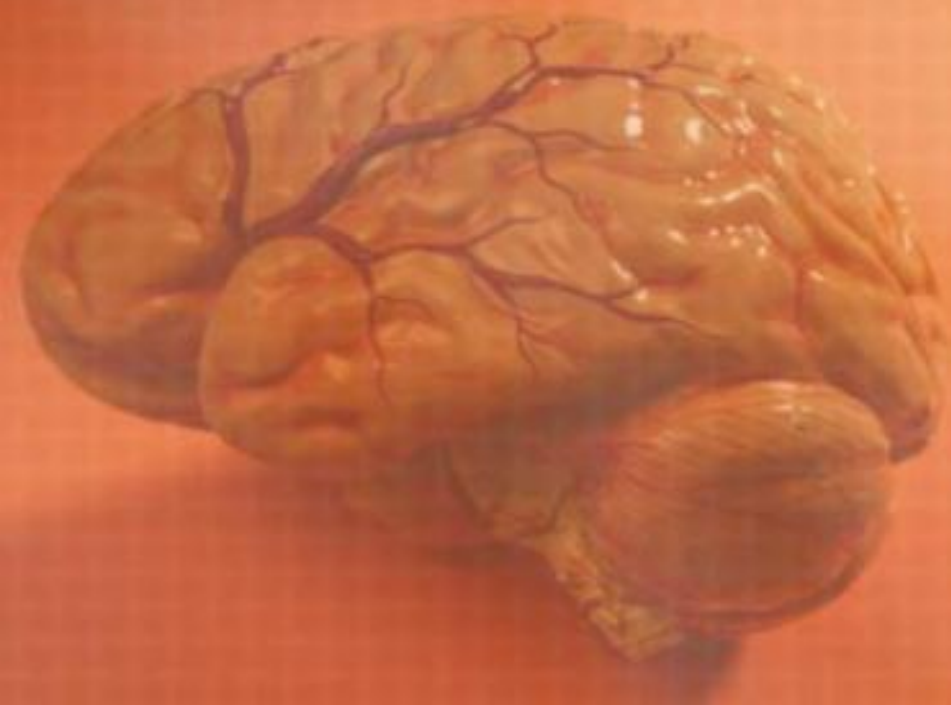
Differential Diagnosis

- **Pseudo dementia** : Does the pt feel sad ? any personal losses or major events recently ? Any suicidal thought or ideation ? Any plans for suicide ? Taking any psych meds ? Seeing a psychiatrist
- **Vascular dementia** : Feeling weak in arm / leg / face? Drooling of saliva ? Lost control ? changes in vision / black outs? dysphagia ?
- **Metabolic causes** : any medical problems ? hx suggestive of UTI- urgency, frequency, burning micturition ? missing medications? hx suggestive of hypothyroidism- lethargic, cold intolerant, apathetic, uninterested ? Dehydration--does the pt take enough fluids? any dysphagia ? (may also point to CVA)
- **NPH** : Shuffling gait ? loss of balance, fall ? urinary incontinence?
- **SDH**: Recent trauma ?



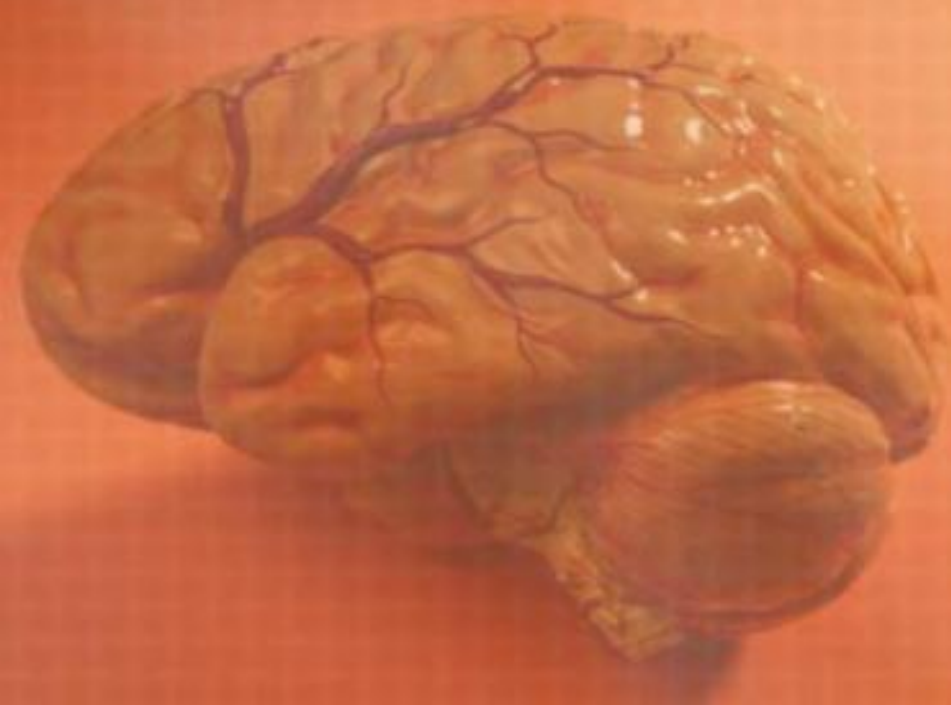
PAM HUGS FOSS

- **Past medical history** : List of all medical problems ? Memory loss in past ? Getting worse ? Episodes of losing or forgetting things, wandering out of home ? Any trauma ? Recent hospital admission, visit to Dr., surgical history.
- **Medications** : Complete list of medications including psych meds ? Any recent change in dose or type of meds? Missed any meds or unable to buy any meds recently ? Any OTC or herbal products ?
- **Social History** : Living condition ? Able to manage alone ? Needs help with ADL ? House-maker or visiting nurse ? Where is family, who takes care of pt ? Who dresses her, handles account, does simple grocery shopping ?



PAM HUGS FOSS (Contd...)

- **Social History** : Any social losses ? Friends or group with which pt interacts ? Intellectually appropriate for age ? does family or close friend think she is safe living in the present condition ? Has she ever been hazard to herself/ others e.g. left the stove open, locked herself out, etc.
- Perform a **Mini-Mental State Exam (MMSE)** at bedside and score the patient out of 30.
- **FH**: History of Alzheimer's in family.



MMSE :Mini Mental State Exam: 30 points

- 1. Orientation to time:** 5 points: Date, Day, Month , year, Season.
- 2. Place:** 5 points: Name of place, floor, city, state, country.
- 3. WORLD or Serial 7's:** 5 points.
- 4. Registration and recall :** 6 points (3+3) : Name 3 common objects and ask pt to repeat e.g. pen, watch, bed. Ask them to recall after a while.
- 5. Language:** 2 points Ask pt to name 2 common objects e.g. glasses, trash can.
- 6. Repeating :** 1 point : Speaking back a phrase : Today is Sunday, Beautiful day outside.
- 7. Complex command :** 3 points- Take the paper in your right hand, fold it in half and put it on the bed.



MMSE :Mini Mental State Exam: 30 points (Contd...)

8. Reading and follow instruction :1 point- Read sentence and follow commands- close your eyes.

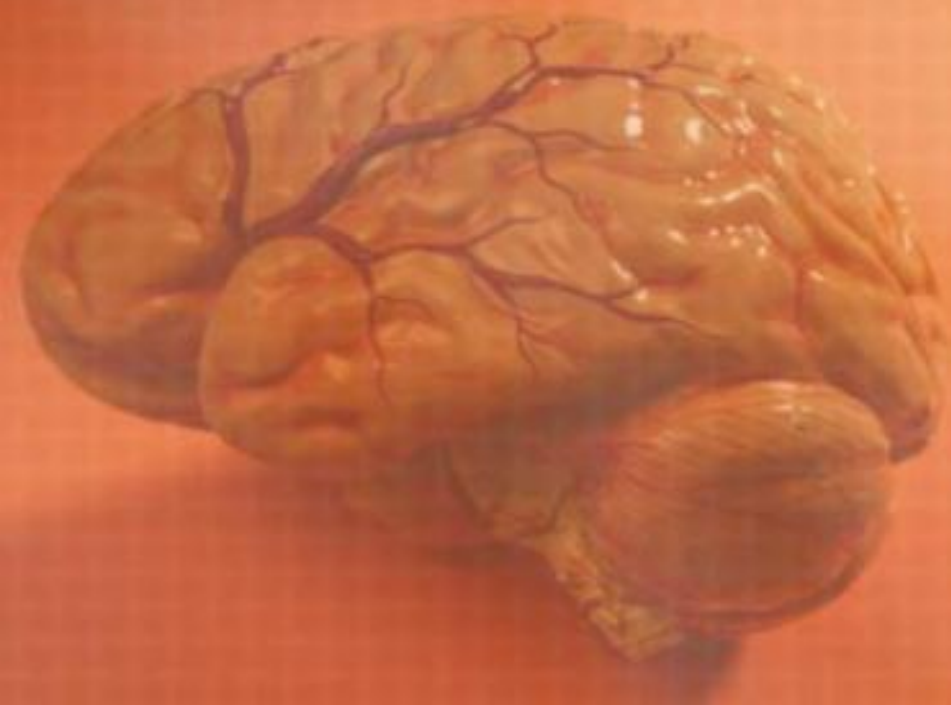
9. Make sentence : 1 point

10.Copy picture :1 point- copy star or any other picture.



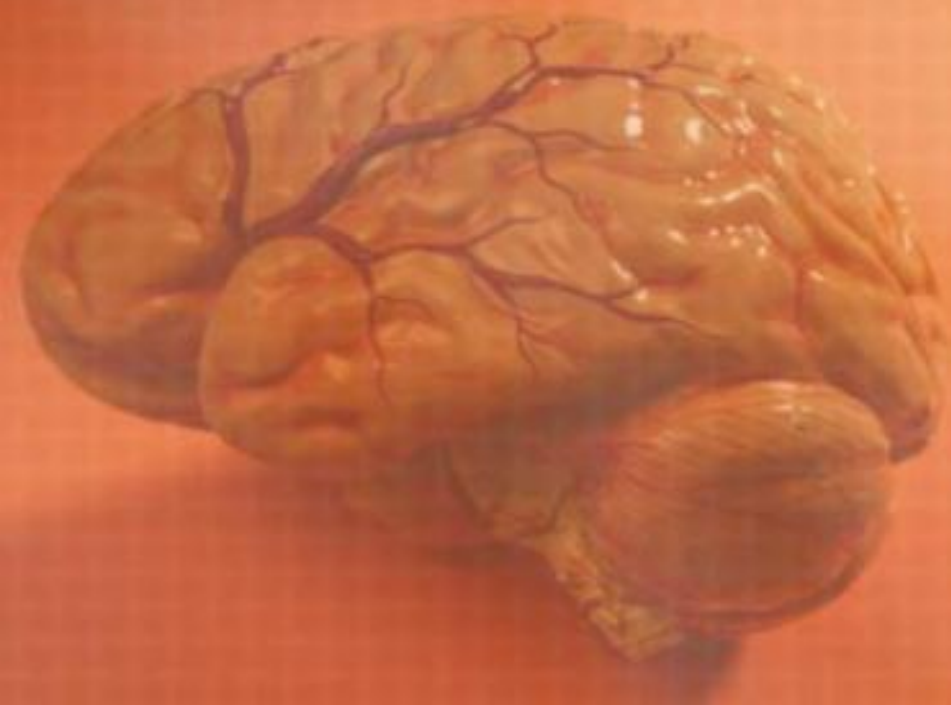
Objective

- Head to toe exam is necessary, with special focus on CNS examination which include motor, sensory, reflexes, Cerebellar tests, gait and Babinski's sign.
- Always do HEENT--you may find "metabolic clues" e.g. Under eye puffiness in CRF, Enlarged thyroid in hypothyroidism, KF ring in Wilson's disease.
- Do a quick but effective RS, CVS and Abdo exam --to rule out other causes like Pneumonia, Heart failure, UTI etc. as cause for altered mental status.
- Gait must be assessed - it can give valuable clues- if possible, do the "get up and go" test : pt is instructed to get up from sitting position in chair, walk a little distance, turn around and walk back.
- Be ready to support them if there is any risk of fall.



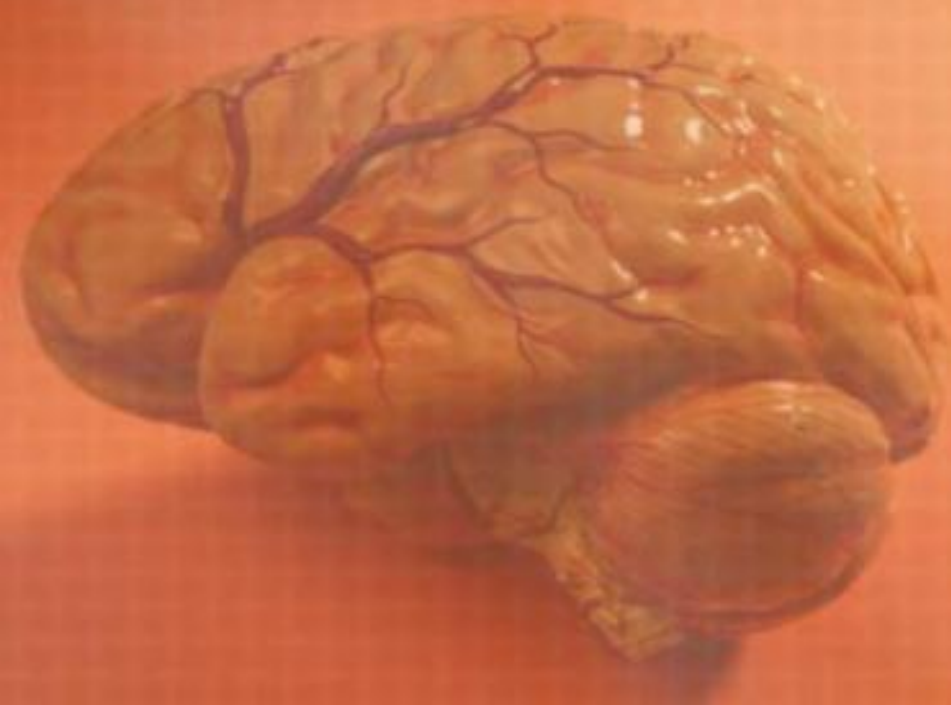
Closure: Assessment and Plan discussion

- Thank the pt for their co-operation. Help them get back into bed/chair and make them comfortable.
- Reassure that they have done the right thing by coming in to the hospital.
- Tell the family/ neighbor/ care taker/ friend about your assessment.
- " There are a number of possibilities that I am considering at this time. Alzheimer's dementia is at the top. That is, as you grow older, the functions of your brain decrease. "
- " There may also be an underlying medical condition. Or a psychiatric issue such as depression. "



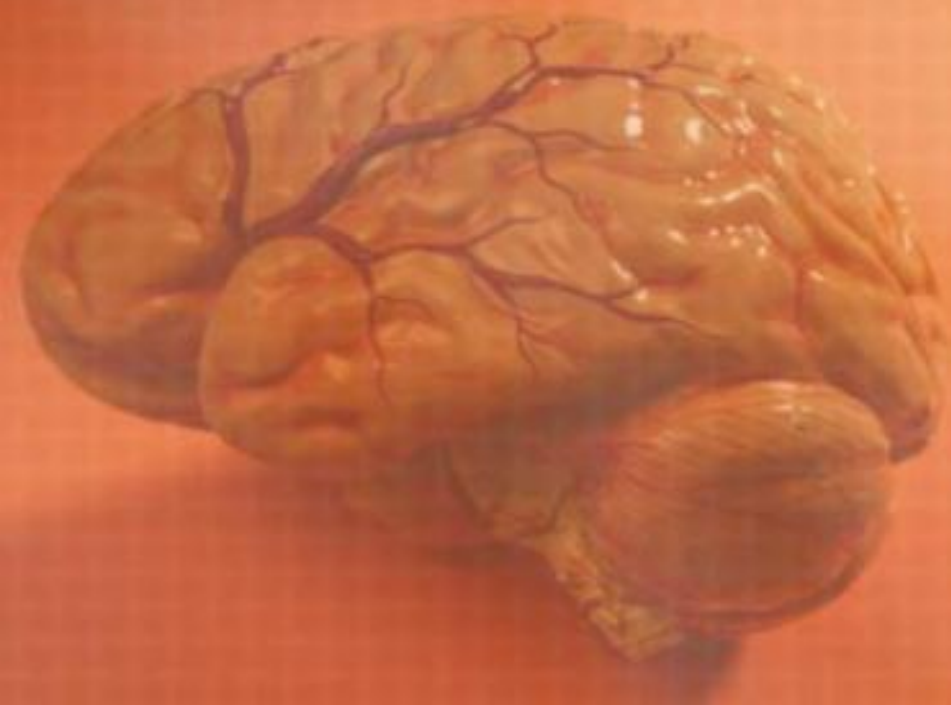
Closure: Assessment and Plan discussion (Contd...)

- We need to run some basic labs and do an imaging , a CAT scan of the head to be sure what it is.
- After we get some initial results, I will be in a better position to tell you what we are treating. Then we will go over the plan again.
- Social issues such as placement/ help in providing care, may also need to be addressed at a later stage.
- Follow-up plan should be explained to patient and family. It is also important to provide all information about various resources such as support groups and referral to social worker, Geriatrician etc.
- Is there any other question or concern at this time ?
- I will be available meanwhile, so if anything comes up please let me know.
- Thank them and leave the room.



SOAP note

- An 87 y/o white female, with past med. hx of HTN, repleted hypothyroidism and NIDDM was found confused by her neighbors. Pt lost her best friend since high school 5 months ago. She has reportedly been "slowing down" since the last 6-7 years but has run extremely down hill after the death of her friend.
- Last week, she was brought back home from the downtown, by the police, who found her confused and unable to recall her name or address. Three months ago, she once left her cooking stove on and left home to go to the bank but was instead found by a friend, in a grocery store, fighting with the person at check out and asking for her social security money.
- She lives by her self, her daughter often visits and she has a visiting nurse come in twice a week. She has often not bathed or smells, per the nurse's report.



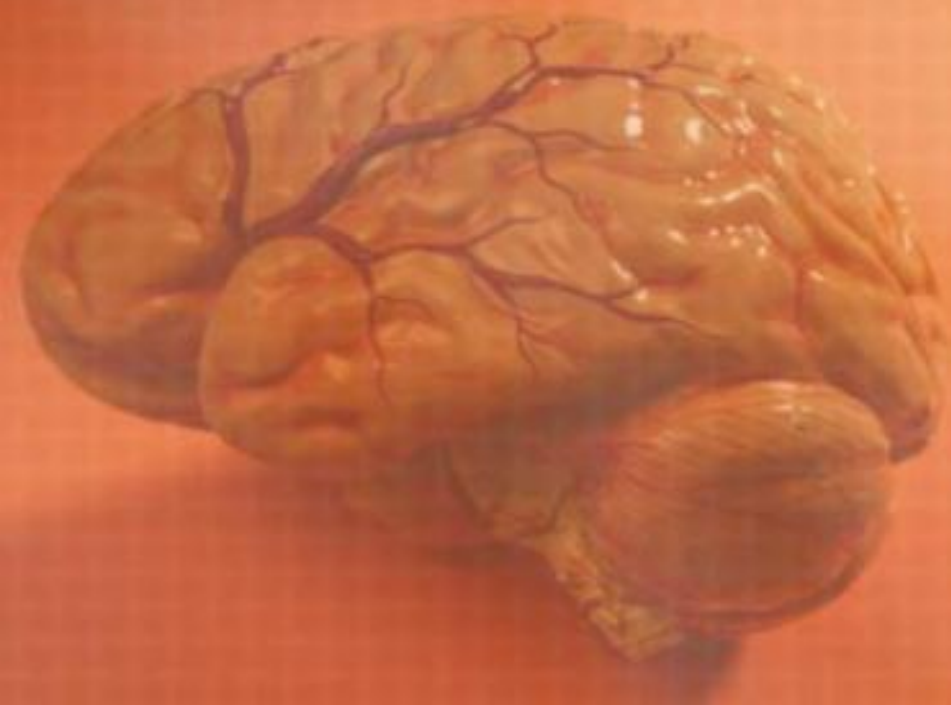
Physical Examination

- Vital signs stable.
- **General** : Psychomotor slowing present. Often weeps during H&P and asks when she can go home.
- **HEENT** : NAD- no enlargement of neck noted, thyroid not palpable. Fundus - 1+ hypertensive changes bilaterally.
- **RS** : Good air entry bilaterally. Bibasilar crackles heard.
- **CVS**: S1, S2, irregularly irregular pulse, no murmurs, rubs or gallops heard.
- **Abdomen**: soft, non tender, non distended. no organomegaly. Clothes smell of urine.
- **Extremities** : 1+ pitting pedal edema bilaterally. Good DP pulses.
- **CNS** : Non focal exam. CN II to XII grossly intact bilaterally. Gait-slow but no other gait disturbances otherwise.
- Explains, offers and performs OMM if indicated.



MMSE and Psychiatric assessment

- **MMSE Score** : 6 out of 30
- **Psychiatric** : Signs of depression positive.
- Pt looks sad, shoulders drooping, often weeps easily during the interview. Feels depressed and worthless, doesn't feel like doing much since losing her friend. Reports sleeping poorly and having lost her appetite. Denies suicidal thought, ideation or plans.



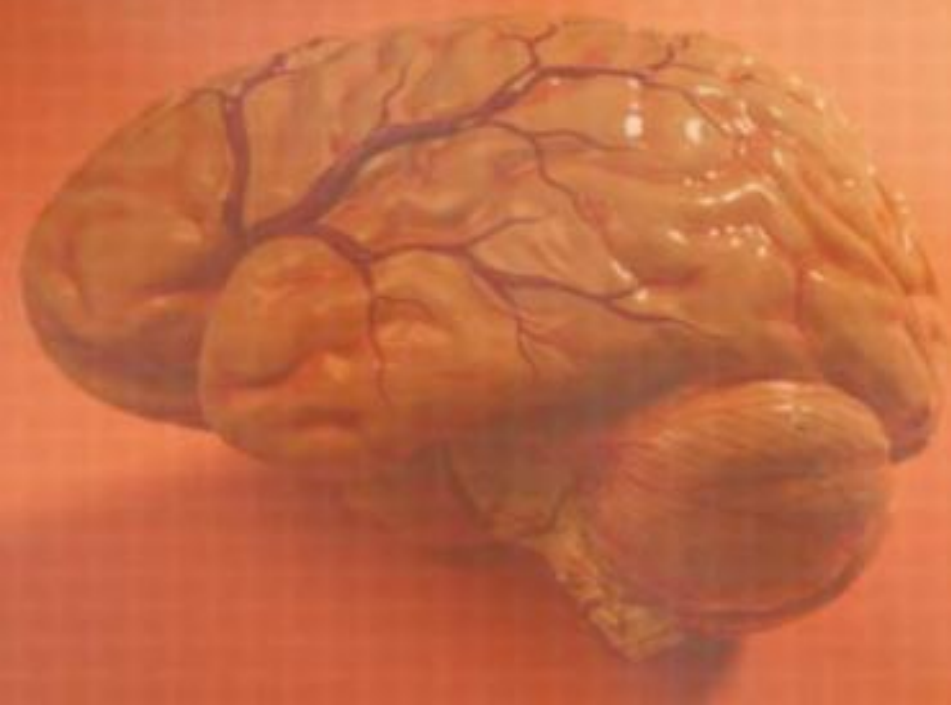
Assessment and Plan:

- **Assessment:**

1. Alzheimer's disease
2. Pseudo dementia
3. Hypothyroidism
4. Metabolic or Medical causes
5. Vascular dementia
6. Lewy Body Dementia
7. Normal Pressure Hydrocephalus

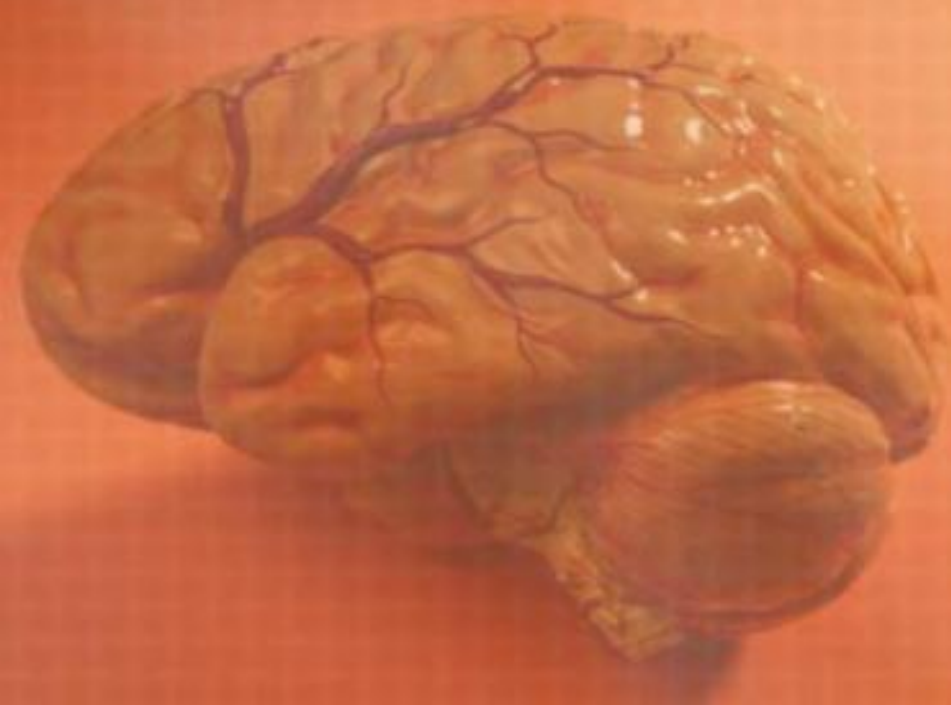
- **Plan:**

1. CBC with differential, CMP, TSH, Vitamin B12
2. Blood levels of certain drugs e.g. Lithium, Digoxin Etc. if pt is taking them.
3. Head CT (Non-contrast)
4. Various social resources including support groups
5. Follow up after a week



Interesting Information

- Between 15-25% of elderly people in the U.S. suffer from significant symptoms of mental illness. While nearly 25% of elderly persons suffer from symptoms of mental illness, many do not seek care.
- Of the direct costs for treating mental illness, less than 1.5% is spent on behalf of the elderly.
- The highest suicide rate in America is among those aged 65 and older.
- The "car-key conversation" bothers a lot of family members in the US: "When is it time to take away the car keys from grandpa or grandma? “
- Many care providers including family members of such geriatric patient themselves may suffer from sub-clinical depression, bouts of hypothyria and are at higher risk for other psychiatric illnesses.



Happy Reading

