

Cognitive disorders or Memory Loss, When to Worry

*OK Alliance on Aging
OKC June 17, 2025*

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“Dementia” or “Neurocognitive disorders”



- Definitions
- Risk factors
- Key questions
- Evaluation
- Staging
- Causes of cognitive decline
- Genetics
- Prevention
- Medical Treatment
- Social Services
- Scams

Definitions



- Dementia / Alzheimer's
- Neurocognitive disorders
(Major/Mild/Delirium)
- Senility (Senile vs presenile dementia)
- "Young" vs "Early" onset
- Delirium (Confusion)
- Sundowning
- Mild Cognitive Impairment

Risk factors as of 2024



- AGE is #1!!!!
- Genetics
- Low education
- Head trauma
- Hearing loss
- Vision loss
- Depression
- Air pollution
- Vascular
 - **Blood pressure
 - Smoking
 - Alcohol
 - Obesity & Hi LDL
 - Diabetes
 - Physical inactivity

Key questions (1)



- Who is worried? Why?
- Is this a change from baseline?
- When / how did it start? [*Acute, Insidious*]
- Is it getting better, worse, stable or fluctuating?
- Medication recent changes
- Problems handling meds, money, work, driving, getting lost? (IADL)
- Trouble with cooking, computer, microwave, thermostat? (IADL)

Key questions (2)



- Repeats questions or stories
- Trouble finding the right words
- Major change in personality / judgement?
- Recent urinary incontinence
- Unsteady gait or falls
- Head trauma, stroke,
- Seizures
- Toxins: agent orange
- Family History

Evaluation



- Medical, Drug & alcohol review
- IADLs & ADLs
- Vision, Hearing, Tactile sensation
- (Taste & Smell)
- Mental status & Mood
- Gait, balance, posture
- Speech
- Strength, Coordination,
- Eye movement
- Tremors?

Staging



- Based on ADLs, IADLs, Cognition
- Range from 3 -14 +
 - (Early/Mild-middle/Moderate-Late/Severe)
 - Early does NOT mean "young" onset
- My preference:
 - MCI, Mild, Moderate, Severe, Terminal
- Now Pre-symptomatic/pre-clinical
 - Based on bio-markers- for research

Cognitive tests



- Attention
- Memory
- Language / Math
- Visuospatial
- Emotional skills
- Executive: Planning/Judgement

Labs



- Blood counts, Electrolytes,
- Kidney, Liver, Thyroid, B12, Lipids
- Specific test for Syphilis
[FTA or MHATP]
- Homocysteine
- Urine
- HIV, COVID
- Drug levels

Special Tests



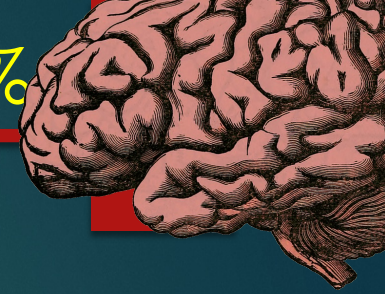
- Head scan: MRI/ CT/ PET
- RISA Cisternogram/SPECT scan
- *Brain Wave test [EEG]*
- *Spinal Fluid*
- *Amyloid / Tau markers*
- *Genetic testing*
- *Brain biopsy** (Autopsy)*

Causes of Dementia



- Alzheimer's
- Lewy Body
- Fronto-Temporal/
Pick's
- Primary Progressive
Aphasia
- Chronic Traumatic
Encephalopathy
- Strokes
- Normal Pressure
Hydrocephalus
- Sub dural
hematoma
- Brain Tumor
- Low B12
- Low/high Thyroid
- Neurosyphilis
- Long COVID
- HIV
- Mad Cow/ JC

Prevention: MAY reduce risk nearly 50%



- Intellectual engagement
- Social engagement
- Avoid head trauma & pollution
- Correct hearing /vision impairment
- Heart healthy: exercise and diet
- Control vascular risk factors
 - Blood pressure, Diabetes
 - Tobacco, Alcohol
 - Obesity, elevated LDL
 - Treat Atrial Fibrillation
 - Reduce inflammation



Other causes of impairment



- Learning disabilities
- Hearing/vision loss
- Sleep deprivation
- Vitamin / nutritional deficiencies
- Stroke/ Tumors
- Alcohol
- Seizures
- Meningitis
- Psychiatric
- Malingering
- Delirium****
 - Medications
 - Dehydration
 - Infection/ UTI
 - Organ failure:
Lung, heart, thyroid
 - Diabetes

The Genetics Story



- Down's: (trisomy 21) with young AD (1929)
- “Young” onset before 65 (vs “early”)
 - Presenilin 1 (xsome 14), Presenilin 2 (xsome 1), APP (xsome 21): Account for <5% of cases
- Apo e4 accounts for 2-5% of late onset
 - “risk gene” DOES NOT PREDICT
- Is Alzheimer's one disease?
- Should we get gene testing?
- GINA (Genetic Nondiscrimination Act) (2008)
 - only for health insurance and employment
 - No protection on Life and LTC insurance

Medical Treatments?



- Cholinesterase inhibitors [*donepezil, galantamine, rivastigmine & combo*]
- NMDA receptor blockers [*memantine*]
- Anti Amyloid antibody infusions
 - aducanumab (*Aduhelm*), lecanemab (*Leqembi*)
donanemab (*Kisunla*)
 - Outrageously Expensive \$32K/yr+
 - Serious side effects: brain bleeds, death
- Supplements, Prevagen, hyperbaric oxygen, transcranial stimulation
- Future hope: Anti Tau, Genetic modifications

Management



- Stop offending meds
- Reverse deficits
 - Cataracts
 - Hearing aids
 - Physical therapy
- Adapt to deficits
 - Modify vehicle
 - Set up auto pay
- Shunt

Support Services



- Alzheimer's Association
- Support groups
- Gardens / Animals
- Area Agencies on Aging
- Home Health
- Private duty care
- Adult Day Care
- Assisted Living
- Memory Care
- Nursing home Care
- Hospice

Some examples



LESSONS LEARNED

Not her normal!



- 87 y/o with a Masters in Education, volunteer tax preparer for AARP
- At 88 she was late with her taxes & her papers were in disarray.
- Neuropsych testing: “normal”
- BUT it wasn't HER normal!!
- Progressed to classic AD

Know Baseline



- 28 y/o man with high fever marked change in mental status and stiff neck
- LP showed meningitis
- Treated with antibiotics and recovered, but cognition impaired to our testing
- We advised his friends he may not fully recover.
- They said he was back to his old self.

Over Medication



- 66yo with 3-year slow decline in cognition & function
- Initial diagnosis: dementia, AD
- Likely Dx: delirium
- Stopped most medications- led to full recovery
- Lived independently until death from cancer 4 years later

Too old to treat?



- 90 y/o man with advanced dementia
- Diagnosis “AD”
- Neuro SYPHILIS test positive
- Allergic to penicillin/Desensitized
- IV penicillin given
- Patient fully recovered until death 4 years later

The magician



- 73 y/o magician complained of memory loss
- Mini Mental state Exam = 30
- Dx: Depression
- Specialized in memory tricks
- Progressed to classic AD over 3 years
- If they complain about memory, they may be right

Importance of autopsy



- For family
- For research
- For future patients
- For teaching
- How do we know
when we are wrong?

Too good to be true



- International multibillion dollar Scam
- June 2019----The dinner/talk
- The investigation
- Mastermind of protocol - NYT best seller
- UCLA & Cleveland Clinic connections
- Alerted: media (local, NYT, STAT),
AARP, Alzheimer's Association,
AG , FBI, FTC [NYT article 5/2025]
- Still on Facebook & very popular





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Identifying needs of aging Oklahomans
Educating on issues
Advocating for solutions



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