DIFFERENTIATING MOOD DISORDERS FROM COGNITIVE CHANGES

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RISK OF DEVELOPING DEMENTIA INCREASES WITH AGE



- In the general population, risk begins increasingly significantly after age 65
- It is estimated that by age 85, between 25% and 50% of all individuals will exhibit signs of a progressive dementia
- Individuals with pre-existing intellectual disabilities or brain trauma are more likely to develop a dementia at an earlier age

INDIVIDUALS WITH PRE-EXISTING INTELLECTUAL DISABILITY OR BRAIN TRAUMA ARE MORE LIKELY TO DEVELOP A DEMENTIA AT AN EARLIER AGE

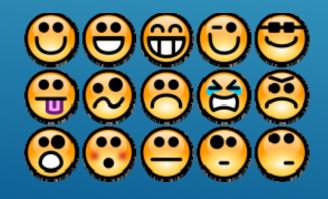
- A certain amount of cognitive decline associated with aging is normal
- We decline from our baseline
- Our pre-existing weaknesses decline from a more fragile starting point
- In persons with already weak cognition, it takes less decline to exhibit signs of dementia,
- Individuals with intellectual disability may begin exhibiting signs of dementia as early as their late 40's or 50's.

WHAT WAS "NORMAL" FOR AN INDIVIDUAL WITH PRE-EXISTING INTELLECTUAL DISABILITY OR BRAIN TRAUMA MAY CHANGE.

- Dementia can superimpose on intellectual disability
- What was normal for an individual may change, and have to be thought about in a different way
- The same rules about behavior that used to apply, may change.

THERE IS A HIGH CORRELATION BETWEEN DEMENTIA / COGNITIVE IMPAIRMENT AND MOOD AND BEHAVIOR PROBLEMS

- This is true for individuals with and without pre-existing intellectual disabilities and brain trauma.
- The following slides are applicable to all populations, and important to recognize in all aging individuals

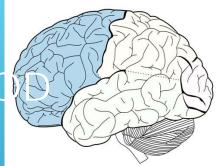


INDIVIDUALS WITH COGNITIVE IMPAIRMENT / DEMENTIA ARE MORE LIKELY TO EXHIBIT DEPRESSION, ANXIETY, PARANOIA, "PSYCHOSIS", AND BEHAVIORAL DISTURBANCES

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- This may be due to:
 - Changes in the brain that make someone more prone to mood problems
 - Mislabeling and misdiagnosing cognitive problems as "mood" problems
 - Adjustment-related depression/anxiety that occur when an individual recognizes their cognitive decline and it triggers sadness or fear

BRAIN CHANGES CAN CAUSE MOC PROBLEMS



- The frontal lobe of the brain is responsible for "executive functioning," which controls a lot of our moods and behaviors.
- The frontal lobe of the brain is very sensitive to cognitive decline, dementia, head trauma, vascular issues and certain medical issues. It is among one of the first areas of brain functioning to show changes in many instances of cognitive decline.
- Frontal lobe damage can cause depression, anxiety, moodiness and mood swings, disinhibited behavior, lack of motivation and initiation, loss of pleasure and joy, and irritability/anger.

BRAIN CHANGES CAN CAUSE MOOD PROBLEMS

In some individuals, the development of depression and anxiety in later life (not associated with situational variables such as loss and change), can be a prodrome to the development of dementia, and a sign that subtle changes are occurring within the brain.

ADJUSTMENT RELATED MOOD ISSUES: MANY INDIVIDUALS WILL NOTICE CHANGES IN THEIR COGNITION, OR MAY EXPERIENCE THIS AS CHANGES FROM WHAT THEY WERE ABLE TO DO BEFORE

- This will most frequently occur early in a dementing process
- As individuals become further impaired, they will likely lose insight into their memory loss, changes in functioning, or dementia
- Individuals who recognize changes in themselves and / or loss of functioning, are prone to sadness about loss, and also anxiety and fear about what is going to happen to them.

- The symptoms of dementia and cognitive impairment often have significant overlap with what we consider to be classic signs of depression, anxiety, or psychosis. However, in the case of dementia and cognitive impairment, these symptoms may not be due to mood problems at all.
- What a symptom means in a younger adult can sometimes be different than what it means in an older adult, and we need to be vigilant to this and think outside of the box

Symptoms of dementia that are often attributed to depression can include:

- Fatigue
- Sleep disturbance
- Appetite problems either decreased or increase appetite
- Changes in socialization and withdrawal from previously enjoyed activities
- Decreased talking
- Lack of initiation and motivation
- Decreased bathing, hygiene, clothes changing, and self-care
- Apathy
- Loss of Pleasure and flattened affect



Fatigue and loss of energy is often thought of as occurring with depression, but can also be the result of underlying medical or vascular issues with may be causing cognitive impairment

Sleep disturbance are common in dementia and cognitive impairment. They can result from changes to parts of the brain that are responsible for REM sleep. They can also result from poor day/night orientation and confusion. They are not necessarily the same as an individual with depression who sleeps too much, or has difficulty falling asleep or wakes up in the middle of the night.

Appetite problems...

Decreased appetite: Individuals with cognitive impairment may not eat because they forget that it is time to eat, or don't realize that they haven't eaten. Ability to taste food may decrease. Underlying medical issues may sometimes result in weight loss.

Increase appetite: Individuals may forget that they have just eaten, or lose the ability to self-regulate their behavior.

Changes in socialization and withdrawal from previously enjoyed activities:

Individuals may not want to socialize as they once did, because they have more difficulty participating in or following conversations. They may feel increasingly anxious and confused in social situations.

Individuals may withdrawal from previously enjoyed activities, because they are having difficulty performing them, or because of frontal lobe changes that take away pleasure, initiation, and motivation and decrease their internal desire to participate.

Decreased talking / speech:

An individual may decrease their speech and talking due to increased language dysfunction, wordfinding difficulty, or difficulty with comprehension. They may also have more difficulty generating thoughts and ideas. This may be subtle, and not recognized by others for cognitive impairment.

Lack of initiation and motivation, apathy, and loss of pleasure and flattened affect:

May all be signs of frontal lobe dysfunction which can cause ALL of these changes, even in the absence of depression

Decreased bathing, hygiene, clothes changing, and self-care – Individuals may forget to engage in self-care, become disoriented to the last time they showered, changed their clothing, etc., or simply forget how to perform these activities.

Symptoms of dementia that are often attributed to anxiety can include:

- Repetitive questions
- Pacing
- Irritability
- Generalized worry
- Increased fear
- Not wanting to be alone
- Withdrawal from social activities (social anxiety)



Repetitive questions are often a sign of memory loss. "Anxiety" is related to not remembering information, or concerns about not having information and feeling disoriented

Pacing and restlessness can be related to confusion, performing repetitive behaviors because they don't remember doing them previously, losing track of time, or increased psychomotor agitation.

Generalized worry and increased fear are often due to not remembering information. This results in a secondary anxiety due to misperception of events, disorientation, or believing things are a problem which have actually been resolved.

An individual with dementia / cognitive impairment will sometimes not want to be alone because they feel disoriented, don't know where they are, are fearful of others who they don't remember, recognize that they have difficulty functioning on their own, or don't know what they should be doing without outside direction.

Individuals with cognitive impairment and / or dementia may withdraw from social activities due to loss of initiation, pleasure, or difficulty functioning in social situations.

Irritability and / or anger may be a result of confusion, frustration, attempting to cover for deficits, or frontal lobe disinhibition.

Symptoms of dementia that are often attributed to psychosis can include:

- Hallucinations
- Delusions



Individuals with cognitive impairment may report seeing people who aren't there, people coming into their living areas and taking things, and occasionally, hearing people's voices.

Actual visual hallucinations are commonly associated with Lewy Body Dementia, Parkinson's-Related Dementia, macular degeneration, urinary tract infections in individuals with cognitive impairments, and certain underlying medical conditions.

More frequently, "hallucinations" of someone entering a living area are a result of memory loss, or an individual trying to piece together missing puzzle pieces to come up with an explanation of "missing" items or an event. They may also result from misplaced memories from the past, and are seldom actual hallucinatory phenomena.

"Delusions" such as someone entering the living area, other's stealing property or money, paranoia regarding others intentions towards them, unusual recall of events, are usually not "delusions" at all, but, rather, a result of memory loss and disorientation that lead to poor recall of events, misinterpretation of information, and filling in the missing pieces with what appears to be a logical explanation to the individual with dementia.

ASKING AN INDIVIDUAL IF THEY ARE HAVING PROBLEMS WITH THEIR MOOD, OR RELYING ON THE PRESENCE OF "SYMPTOMS", MAY NOT BE THE MOST RELIABLE WAY TO DIFFERENTIATE ANXIETY OR DEPRESSION FROM COGNITIVE IMPAIRMENT



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- Individuals will sometimes answer "yes," as a way to cover up their cognitive impairments
- Being diagnosed with depression/anxiety is preferable to most people over having dementia
- Often an individual is not sure what is going on with themselves
- Decreasing language dysfunction may make it more difficult for an individual to reliably describe what they are feeling
- Insight decreases in cognitive impairment / dementia
- Frontal lobe dysfunction may mimic the same symptoms
- The "symptoms" that we ask about may have a different meaning in an older adult with dementia. (e.g. they may be withdrawing, but not be depressed about it, and be perfectly comfortable with the change.)



Start with a good clinical interview of patient and caregivers

If possible, interview caregivers first to learn information about the patient regarding their baseline, and any changes that have taken place. This can be used to prompt the patient during your interview with them.

Questions to ask caregivers:

- What changes have you noticed in the individual?
- Have these changes occurred abruptly, or slowly over time?
- Are there things that the individual used to be able to do on their own that they can't anymore, or that they need assistance with?
- Is there increased agitation or irritability?
- Are there signs of new behavioral disinhibition?
- Are there any new medical issues? What are the chronic medical issues?
- Is there any evidence of changes in physical status? (problems with gait or balance, tremors)
- Does the individual have trouble recognizing people and familiar places that they would expect to remember?
- Are there changes in speech/language?

Questions to ask patients:

- Ask them personal questions and questions about their history that they would generally be expected to know (based on what people would usually know, or on what the caregiver said they used to know)
- This could include:
 - Names of current caregivers or persons in the daily environment
 - Names of parents, siblings, children, and grandchildren (in dementia, the oldest information with stay the longest, and names of grandchildren will generally disappear first.)
 - Places the individual used to work, or schools they attended (again, in dementia, the oldest information disappears first
- Ask them open ended questions about things that they enjoy doing and what they do on a daily basis, and look for difficulty answering these questions or generating ideas.
- Ask them simple memory-related questions, such as what they had for breakfast that day, what color shirt they wore the day before, etc.
- Check for orientation to person, time, and place

Questions to ask patients:

 Ask open-ended questions about the specific symptoms that may be raising concerns about anxiety/depression/mood issues, and inquire about the individual's reasons for them, and the meaning behind them

E.G. "I heard that you don't want to go to bingo with your friends anymore. Is that true? Why don't you want to go anymore? Does it bother you to not go? Is there something that you'd rather do?"

An individual with depression will be more apt to have specific reasons as to why they don't want to go, and some emotional reaction associated with their reason. An individual with dementia will be more likely to tell you that they don't know why they aren't going, that they "just don't want to anymore," and they are much more likely to be content with not going, and not bothered by the special withdrawal.

E.G. "I heard you aren't eating the things that you used to enjoy, and aren't really hungry anymore. Why aren't you eating?

An individual with depression may tell you that they have lost their appetite, or don't feel well. An individual with dementia will be more likely to tell you that they are eating just like they always have, or give a superficial reason such as, "I don't like the food," or, "I was trying to lose weight."

Questions to ask patients:

- After gathering questions about mental status, basic memory, and exploring symptoms, then ask questions about mood.
- Are you feeling sad?
- Are you feeling nervous?
- Are you worried?

Consider the answers to these questions in the context of the rest of the interview.



If the problem does not become clear after good clinical interviews with both patient and caregivers...

Consider cognitive testing / neuropsychological evaluation by a professional skilled in dealing with older adults or persons with cognitive impairments and dementia

A skilled professional will usually be able to differentiate between intellectual disability and dementia. Particularly if a general baseline of functioning is known, but often even if it is not.

From a neuropsychological perspective, intellectual disability looks different on testing than dementia does,

From a neuropsychological perspective, mood problems look *much different* on testing than cognitive impairment and dementia do. This is also true for "pseudodementias."



Mood problems rarely cause significant impairments on neuropsychological evaluation, although anxiety can cause attention to fluctuate somewhat, and moderate to severe depression can cause some slowness in processing speed. Cognitive impairment and dementia, however, tend to cause specific cognitive profiles that look distinct.

Possible outcomes from clinical interview, plus cognitive testing include:

- 1. Mood issue only in an individual with or without pre-existing intellectual disability
- 2. What looks like a mood issue, is actually a sign of increasing cognitive impairment, or dementia.
- 3. There are cognitive changes or dementia with a mood issue superimposed onto it.

Pay attention to the symptoms that are causing distress for the individual.

Pay less attention to the symptoms that are not causing distress to them.

(e.g.If an individual has become content being less active and socially involved, and does not interpret this as a problem, and it's not causing them any difficulties ...do not necessarily interpret this as a sign of depression that needs to be "fixed."



Problem-solve practical strategies for the symptoms that are causing an individual distress

- If they are anxious because they are disoriented, figure out ways to increase orientation, provide familiar routine, etc.
- If they are sad because they do not remember seeing their loved ones as frequently as they might actually be visiting, mark days that they visited on a calendar, schedule phone calls on a prescribed basis, and provide tangible reminders of a patient's connection to their family in the living environment. Consider outside, friendly visitors.
- If they are irritated and frustrated at not being able to perform activities that they used to, problem-solve activities that they can be successful at.

If an individual has insight into their cognitive changes, and expresses sadness or fear about them, or about other aspects in their life, consider psychotherapy. Many individuals with various cognitive impairments benefit from talking about their problems and getting support.

In an individual with decreased language or decreased ability to generate thoughts, it is not necessary to rely as heavily on speech. Offer activities, engage in activities with them, be comfortable with silence, and provide quiet companionship. Look for cues in body language and behaviors to see how they are doing.



Encourage exercise

- Multiple studies have shown that aerobic exercise is as effective as antidepressant therapy for many individuals with milder depression, and effective as adjunct treatment for more serious depression.
- Exercise can be effective in individuals with restlessness and anxiety, to help get excess energy out, which may help with pacing, reducing increased psychomotor activity, etc.

Occupy the mind

When an individual is busy or distracted, they are less likely to ruminate on depressive and anxious thoughts. The activity competes for attention with their mood symptoms.

Encourage group activities, day programming, exercise, participating in chores/household tasks, games, coloring, knitting a project for gifts, etc., to help distract from negative feelings.

Manage Medical Conditions

Healthier individuals feel better. And acute illnesses and infections can wreak havoc on the cognition of an individual who is already impaired. Poor cognition results in decreased orientation, memory, and problem-solving that can lead to increased distress.

Medication Management

An individual whose symptoms represent cognitive impairment, but not a mood problem, is unlikely to benefit from medication therapy. Just because it looks like depression, doesn't mean that it is.

In the case of genuine mood problems, however, medication can be used to treat depression, and to reduce anxiety and irritation.

Many physicians may also treat psychosis in dementia; however, the success of this may rely on whether the psychosis is actually disorientation and confabulation due to memory loss. In which case, the anxiety and irritability can still be treated.

Suicidality is not the same as the passive desire for end of life that some individuals express in the face of loss, grief, medical issues, chronic pain, and realization of a diagnosis of cognitive impairment.

ASK if someone has thoughts of harming themselves, and if they have a plan or means.

Often you will find that an individual has no intention of harming themselves, but simply wants to be at rest, and wishes that would come sooner versus later.

If there is a passive wish for the end of life WITHOUT suicidal thoughts, plan, or intent, then evaluate to determine whether further treatment for depression is warranted.

Sometimes, an individual may wish for the end of life, but not be depressed.

If there are thoughts of self-harm, then question for intent and plan.

If there is imminent risk, then refer to emergency treatment.

If there is not imminent risk, then continue appropriate level of outpatient treatment, and remove means of self-harm from the environment.

Consider whether an individual is capable of utilizing a given means, given their cognitive impairment, and err on the side of caution.

Recognize that, in some individuals, impulsivity and acting out can be part of cognitive impairment. If an individual has episodes of impulsivity that are hard to predict, then extra care must be taken.