

MIND

WHAT QUESTIONS SHOULD I AND MY FAMILY BE ASKING?

- Have I or someone else I know well noticed a change in my thinking such as my memory? Am I forgetting more than usual? Has my language and use of words and speech changed?
 - Have I or someone else I know well noticed a change in my behavior?
 - Have I or someone else I know well noticed a change in my ability to do functional activities such as my finances, driving, or taking medication?
 - Have I or someone else I know well noticed repeated questions, poor planning, or missing appointments?
 - Have I or someone else I know well noticed forgetting people's names, faces, or misplacing items?
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WHAT ACTIONS CAN I TAKE FOR THIS AGENDA?

- Talk to your healthcare provider, family doctor, neurologist, or geriatrician for concerns about dementia
- Assessment of dementia is usually done in an outpatient clinic
- Be sure to come with a family member or friend you trust and knows you well to provide more history about you with your consent
- Even if dementia is not reversible, studies have shown that you are more likely to do the tasks that you like if you repeatedly do them more frequently. As such, when dementia worsens you still retain that ability
- Studies have found that exercising at least five times per week, thirty minutes in each session is a good way to keep the brain healthy and lessen the course of dementia
- Eating a healthy diet has been shown to also lessen the course of dementia but the evidence is not that great
- Having a support system with loved ones who help with your functional activities can help complete your daily tasks. Check to see if you are eligible for home care support programs in your area
- Creating a schedule, planner, calendar, and any visual reminders can help you complete your daily tasks
- Make sure you complete your personal directives and power of attorney documents. These are legal documents that specify who you want as an agent to make your

medical and financial decisions on your behalf only when you cannot. Refer to the "[end of life](#)" agenda for more details

WHAT IS THE MIND?

- The mind houses the set of our brain functions
 - The mind is responsible for thinking, memory, consciousness, language, and much more
 - As we age, there are normal brain changes that can happen and cause a decline in our brain function
 - But, there are also abnormal changes that can happen because of diseases
 - These diseases are not normal for aging
 - An example of brain changes not just from aging is thinking (cognitive) impairment
 - One cause of cognitive impairment in older adults is "dementia"
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WHAT IS DEMENTIA?

- The medical term for brain function or thinking is "cognition." Our cognition has many parts to it that makes our brain work
 - Cognition is the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses
 - Dementia is a broad term and can have many types. The most common type is known as Alzheimer's but there are other types as well
 - Another way to say dementia is "major neurocognitive impairment"
 - Dementia causes abnormal changes in our cognition. These changes are not normal and not supposed to be part of aging
 - Memory is only one part of our cognition
 - Other parts of our cognition can be affected too
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WHAT ARE THE TYPES OF DEMENTIA?

- The most common type is Alzheimer's dementia
 - The second most common type is Alzheimer's with blood vessel changes called mixed type dementia
 - The third is pure blood vessel changes called vascular dementia
 - Sometimes these types overlap and it might be difficult to tell one or the other apart
 - There are more rare kinds of dementia such as Lewy Body Dementia, Parkinson's disease causing dementia, and frontal type dementia
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DEMENTIA IS A CHANGE IN BRAIN FUNCTION THAT IS ABNORMAL

IT IS USUALLY MORE THAN JUST MEMORY CHANGES AND USUALLY NOT REVERSIBLE

IT IS NOT A PART OF NORMAL AGING AND IS A DISEASE THAT NEEDS TREATMENT

WHAT ARE THE SYMPTOMS OF DEMENTIA? HOW DOES IT PRESENT?

- Someone with dementia may not notice changes to their thinking, behavior, and function
 - It might take someone who knows you well to notice these things and brings them to the attention of the person and doctor
 - The most common symptom is memory changes and being forgetful. However, dementia can cause more than just memory changes and other parts of our thinking can be affected too
 - We do not typically screen all older adults for dementia. There is no evidence that this is helpful
 - We only assess those that present with concerns from the person, family, or concerns from a doctor
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BUT ISN'T BEING FORGETFUL A NORMAL PART OF AGING?

- There are changes in our brains that happen as we age. These changes can be normal. Even some forgetfulness and language changes can be normal
 - However, dementia is a disease where changes happen in our brain that is abnormal. Your healthcare provider is tasked with teasing out your case and seeing if your changes are normal or not
 - This might need a detailed assessment by talking to you, someone who knows you well, and by doing thinking (cognitive) tests
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WHAT IS MILD COGNITIVE IMPAIRMENT?

- Mild Cognitive Impairment (MCI) is also an abnormal change in brain function. It is not just from normal brain aging
 - When your healthcare provider assesses you, they can find these abnormal changes. However, they are not enough to be called dementia
 - The key difference for simplicity is a change in function
 - If there wasn't a change in function then it is more likely MCI
 - If there are changes in function then it can be dementia
 - Keep in mind that having MCI increases your risk of getting dementia by around 10% per year
 - In summary, there are normal brain changes that happen with age
 - There is also MCI which is not normal but your function is still normal
 - Finally, there is dementia which is not normal and there is loss of function
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**DEMENTIA MAY LIMIT YOUR ABILITY AND SAFETY TO DRIVE.
DISCUSS THIS TOPIC WITH YOUR HEALTHCARE PROVIDER**

WHY IS DEMENTIA A BURDEN?

- Dementia can cause abnormal brain changes to our thinking but also to our behavior too. It can lead to loss of our ability to function and do the tasks we could normally do before
 - Functioning can be divided into basic activities of daily living and instrumental types
 - The basic activities are those such as walking, toileting, bathing, grooming, feeding, and dressing. Think of them as activities someone should be able to do by grade 2
 - The instrumental activities are those such as cooking, housekeeping, laundry, driving, taking medications, using the phone or computer, and managing finances. Think of them as activities someone should be able to do by grade 12
 - With dementia, you usually have a loss of your instrumental types first followed by your basic types as dementia progresses
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WHAT WILL INCREASE MY RISK OF DEMENTIA?

- Many things can increase the risk for dementia. Some can be addressed to reduce the risk which is important in managing and preventing dementia as much as possible
 - Things we can't change that increases risk are increased age, female gender, ethnicity, having a family history of dementia, and head injury
 - Things we can change that increases our risk are high blood pressure, diabetes, smoking, alcohol, high cholesterol, and poor diet and exercise
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THERE IS NO SPECIFIC TEST FOR DEMENTIA. THE KEY SYMPTOM IS LOSS OF FUNCTION. THIS NEEDS A DETAILED ASSESSMENT BY YOUR DOCTOR WITH YOUR HISTORY AND THINKING (COGNITION) TESTS

CAN DEMENTIA BE REVERSED?

- The first thing a doctor does when assessing someone for dementia is to make sure you do not have a reversible type of dementia
- Other diseases can look like dementia and could be reversible that your doctor should look into as well

- An example of a reversible type of dementia is “delirium” which is different than dementia. Delirium can happen quickly and causes confusion and loss of attention. It can happen from changes in medications, infections, and other illnesses. Refer to the [“confusion”](#) agenda for details
 - Other examples of reversible dementia are those such as abnormal changes in our thyroid function, vision or hearing loss, trauma, alcohol or medication changes, and mood changes among many others
 - Unfortunately, the types of dementia we mentioned above such as Alzheimer’s are not reversible and usually get worse over time
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YOUR DOCTOR SHOULD MAKE SURE YOU DO NOT HAVE ANOTHER DIAGNOSIS OR REVERSIBLE TYPES OF DEMENTIA

HOW IS DEMENTIA DIAGNOSED?

- There is no specific or one test that can diagnose dementia. Rather, it is a clinical diagnosis
 - This means we look at the patient’s history and symptoms to diagnose it
 - An observer or someone who knows you well can provide even more information about you. This is called “collateral history”
 - Doctors should ask for permission and consent from you before discussing your case with someone else
 - Thinking (cognitive) testing with your doctor is also important. These tests are usually paper-based and can take a few minutes to complete with a trained examiner
 - There are no specific blood tests or imaging tests that diagnose dementia. However, some of them are very helpful in making sure you do not have another diagnosis or a reversible dementia
 - Your doctor might need to do some blood tests and head imaging such as a brain CT scan or MRI scan
 - Refer to our [“clinic visits”](#) agenda for more details
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WHAT IS A THINKING (COGNITIVE) TEST?

- A thinking (cognitive) test is usually a paper-based screening tool used by your healthcare provider to look for signs and symptoms of dementia
 - Evidence has not shown many benefits in screening all older adults. Rather, these tests are applied in the correct context and concern from family, observers, and provider referrals
 - These tests should be administered by trained healthcare providers. The score should never be taken into account by itself
 - It is important to include the assessment from other parts of the patient's history to make a diagnosis
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I HEARD WE CAN TEST OUR GENES FOR DEMENTIA, SHOULD I BE TESTED IF IT'S IN MY FAMILY?

- The evidence for testing genes for dementia is not great. It does not change management or the diagnosis
 - At this time, genetic testing is for research purposes. It has yet to show much benefit in testing the general population to have a meaningful benefit
 - Some may have the gene but may not develop dementia. Others may not have the gene and still develop dementia. As such, many recommend not doing said gene testing at all
 - Having a first-degree family member with Alzheimer's dementia increases your risk for it by 30%
 - A first-degree relative means your parents, siblings, and children
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THE THINKING (COGNITIVE) PARTS IN OUR BRAIN THAT CAN BE AFFECTED INCLUDE MEMORY, KNOWING THE PLACE, TIME AND PERSON, LANGUAGE, JUDGMENT, PLANNING, AND COMPLETING BASIC DAILY TASKS (FUNCTION)

IS THERE A CURE FOR DEMENTIA? IS THERE TREATMENT?

- Despite there being no cure for dementia, there are treatments divided into lifestyle changes and, in some cases, medications
 - Lifestyle changes are mainly those that help the blood supply to your brain remain at its best. That is, controlling diabetes, controlling high blood pressure, making sure your cholesterol is not high, stopping alcohol and smoking, and overall better diet, exercise, and sleep
 - There is some evidence for medications that may help in reducing or slow down dementia but not cure it. The class name of these medications are known as “cholinesterase inhibitors”
 - Even then, these medications have moderate effects at best and are usually reserved for those with mild to moderate but not severe dementia
 - Examples of these medications are Donepezil, Galantamine, and Rivastigmine
 - Another medication not in this class is called Memantine and has shown some benefit in severe cases of dementia
 - Talk to your doctor if these medications are right for you. It is important to know what to expect with them and what their side effects are
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WHO SHOULD CONSIDER TAKING DEMENTIA MEDICINE?

- Usually, these medications are not drastic in their benefits but in some cases can help. That depends on the assessment of your doctor
 - There is some evidence, although not much, that they may reduce the behavioral issues that can come with dementia although this depends on each case
 - It is important to remember that the evidence for these medications is mainly for the Alzheimer’s type of dementia. They may be used in other types of dementia but the evidence for them is not as strong
 - Sadly, their side effects in some cases may not be worth starting them to begin with
 - Always talk to your doctor about these medications. It is a continuous discussion to assess your specific case if the benefit is greater than the risk and worth starting them or not
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CHOOSING WHETHER OR NOT TO TAKE MEDICINE FOR DEMENTIA IS COMPLICATED. IT DEPENDS ON EACH CASE AND PATIENT AND FAMILY VALUES

IT MAY NOT BE WORTH GOING THROUGH THE HARMS OF THE SIDE EFFECTS SINCE THESE DEMENTIA MEDICATIONS HAVE MODERATE BENEFITS AT BEST

DO THESE MEDICINES HELP WITH MILD COGNITIVE IMPAIRMENT (MCI)?

- Unfortunately, no evidence supports the use of these medications for Mild Cognitive Impairment (MCI). There is evidence that they may cause harm and many side effects
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WHAT ARE THE SIDE EFFECTS OF THESE DEMENTIA MEDICINES CALLED CHOLINESTERASE INHIBITORS?

- Runny nose
 - Nausea, vomiting, and diarrhea
 - Increased mucous in the lungs thus causing worse breathing if you have lung diseases such as asthma or COPD
 - Abnormal heart rhythm and slowed heart rate
 - Urinary symptoms such as urine leaking
 - Worsen weight loss
 - A very rare but serious side effect is muscle breakdown that can cause kidney injury
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WHAT ABOUT THE BEHAVIORAL AND MENTAL HEALTH PARTS OF DEMENTIA?

- Dementia does not just cause problems with our thinking (cognition) but can also cause problems with our behavior and mood
- These changes are called behavioral and psychological symptoms of dementia (BPSD)
- Examples of BPSD can be aggression, agitation, hallucinations, paranoia, depression, or anxiety
- Managing BPSD can be challenging because every person presents differently. The key thing to note is that most studies suggest approaching these changes through non-medication means

- Assessing these can take time and need expertise which is why a detailed assessment from a doctor is highly recommended
 - There is some evidence that the cholinesterase inhibitors and Memantine medications help prevent, although not actively treat, BPSD
 - The “antipsychotic” medication class has also shown some benefit in treating BPSD. However, these have serious side effects and should not be used first at all
 - It is very important to note that using these medications should always be balanced with their risks and side effects. They should be used only in severe cases and complex behavioral problems
 - BPSD is complex and requires a detailed assessment based on the healthcare provider, family, and patient’s values and goals
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DEMENTIA CAN ALSO CAUSE BEHAVIORAL AND PSYCHOLOGICAL SYMPTOMS (BPSD) WHICH CAN BE COMPLEX AND CHALLENGING TO TREAT BUT ARE USUALLY NOT WITH MEDICATIONS

I HEARD THERE ARE OTHER MEDICINES WE CAN TAKE TO PREVENT OR SLOW DOWN DEMENTIA, IS THAT TRUE?

- There are very few studies that have shown benefit with other supplements or medications that can help with dementia
 - There is mixed evidence shown with Ginko Biloba. It is a type of plant from the Maidenhair tree. It is likely not that helpful and not a cure
 - Vitamin E is a vitamin that has been studied but the evidence for improving thinking in dementia is poor. Vitamin E can also be harmful especially for those with heart conditions
 - Sadly, cholesterol-lowering medications, omega-3 fatty acids, estrogen, anti-inflammatory medicines, and marijuana have not been shown to help
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THERE ARE ONLY A FEW MEDICATIONS AND SUPPLEMENTS THAT HAVE SHOWN SOME BENEFIT IN TREATING DEMENTIA

MANY OTHERS HAVE NOT BEEN STUDIED OR HAVE SHOWN TO CAUSE HARM

IF THERE'S NO CURE, WHY DO WE CARE ABOUT DIAGNOSING AND MANAGING DEMENTIA EARLY?

- Diagnosing and managing dementia early is very helpful in addressing many points about our health
 - Benefits of early and effective treatments are:
 - Recognizing that it is a disease and not the person that is at fault for behaving or thinking this way
 - Increasing one's freedom and independence (autonomy) as much as possible
 - Delaying or preventing the need to go to a nursing home or facility
 - Supporting family members and avoiding burnout
 - Providing approaches whether non-medication or medications to address the thinking (cognition), behavior, psychological and functional problems
 - Assessing safety needs such as driving
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DEMENTIA IS NOT REVERSIBLE, LONG-TERM, AND SLOWLY WORSENS. DELIRIUM IS REVERSIBLE, SHORT-TERM, AND HAS MANY CAUSES. IF YOU HAVE DEMENTIA, IT CAN INCREASE YOUR RISK FOR DELIRIUM

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