CONDITION

Neurocognitive disorder

Neurocognitive disorder is an acquired decline in memory or other thinking abilities.

WHAT IT IS
Acquired decline in thinking abilities, sometimes affecting independence

BODY SYSTEM
Nervous system

MAIN SYMPTOMS
Memory, attention, language, planning difficulties

WHAT CAUSES IT
Brain disorders, injuries, substances, medicines, or medical conditions

HOW IT IS DIAGNOSED
Cognitive assessment plus history of everyday function

MAIN TREATMENT
Treating causes, symptom support, rehabilitation, and safety planning

CAN IT BE CURED?
Sometimes - reversible causes can improve

IS IT AN EMERGENCY?
Sometimes - sudden confusion or stroke signs

LONG-TERM OUTLOOK
Stable, improving, or progressive according to cause and severity

Overview

Neurocognitive disorder is a broad term for an acquired decline in one or more thinking abilities. These abilities include memory, attention, language, judgment, learning, and planning.

"Acquired" means the change developed after a person's usual thinking abilities were established. This separates neurocognitive disorder from lifelong learning or developmental differences.

The condition may be described as mild or major . With mild neurocognitive disorder, changes are noticeable but the person remains mostly independent. They may need more time, reminders, or strategies to complete complicated tasks.

Major neurocognitive disorder interferes with independent daily life. A person may need help managing medicines, money, meals, travel, personal care, or household safety. The term

dementia is still widely used for many major neurocognitive disorders.

Neurocognitive disorder is not one single disease. It can result from Alzheimer's disease, blood vessel damage, a brain injury, Parkinson's disease, infection, medicines, substance use, or another medical condition. Some causes are progressive, while others may remain stable or improve.

Occasionally forgetting a name or misplacing an item does not by itself mean someone has a neurocognitive disorder. Diagnosis requires evidence of a decline from the person's previous abilities.

Symptoms

Symptoms depend on which parts of thinking are affected. Memory problems are common, but they are not always the first or most important change.

Possible symptoms include:

A person with mild symptoms may still work, drive, shop, and manage their home. However, these activities may require more effort or take longer.

With major neurocognitive disorder, everyday tasks become less safe or reliable without help. The specific difficulties differ between people. For example, one person may mainly have memory loss, while another has early changes in language, movement, behaviour, or visual understanding.

Sudden confusion developing over hours or days is more suggestive of delirium than a long-term neurocognitive disorder. Delirium can be caused by infection, medicine effects, dehydration, surgery, or another acute illness and needs prompt medical assessment.

- Forgetting recent conversations, appointments, or events
- Repeating questions or relying more heavily on reminders
- Losing track of conversations or becoming easily distracted
- Struggling to find words, understand speech, read, or write
- Finding it harder to plan, solve problems, or follow several steps
- Becoming confused about dates, places, routes, or familiar tasks
- Having difficulty judging risks or making decisions
- Trouble recognising objects or using them correctly
- Changes in personality, motivation, mood, or social behaviour

Causes and risk factors

Neurocognitive disorder can have many causes. More than one cause may be present at the same time.

Common categories include:

Age increases the likelihood of several underlying brain conditions, but neurocognitive disorder is not an inevitable part of ageing.

Other factors may include cardiovascular disease, high blood pressure, diabetes, smoking, hearing loss, limited physical activity, and previous stroke or brain injury. These factors do not prove what caused an individual person's symptoms.

Depression, anxiety, poor sleep, pain, and sensory loss can also interfere with thinking. They may mimic a neurocognitive disorder, worsen an existing one, or occur alongside it.

- Degenerative brain conditions , such as Alzheimer's disease, Lewy body disease, frontotemporal degeneration, or Parkinson's disease
- Blood vessel problems , including strokes or long-term damage to small vessels in the brain
- Brain injury , including repeated injuries or a severe single injury
- Medical conditions , such as thyroid disorders, severe liver or kidney problems, or certain infections
- Nutritional deficiencies , including a lack of vitamin B12
- Medicines or substances , including alcohol and medicines that affect alertness or memory
- Brain tumours, fluid build-up, or other structural problems
- Inherited conditions , although many affected people do not have a directly inherited disorder

Diagnosis

There is no single test that confirms every neurocognitive disorder. Diagnosis combines information about changes in thinking, everyday function, health, and behaviour.

Assessment usually begins with a detailed history. A healthcare professional may ask when the changes began, whether they are worsening, and how they affect work, household tasks, medicines, finances, driving, and self-care.

With permission, information from someone who knows the person well can be helpful. People do not always notice or remember every change themselves.

Short cognitive tests assess abilities such as memory, attention, language, orientation, and problem-solving. These tests support an assessment but cannot identify the cause on their own. Education, language, culture, hearing, vision, anxiety, and fatigue can affect results.

A physical and neurological examination may look for movement changes, weakness, balance problems, or other signs. Blood tests can check for potentially treatable contributors such as thyroid problems, vitamin deficiencies, infection, or organ dysfunction.

Brain imaging with an MRI or CT scan may identify strokes, tumours, injury, fluid build-up, or patterns of brain shrinkage. Imaging does not always provide a definite diagnosis.

Some people need more detailed neuropsychological testing , which measures different thinking skills over several hours. Specialist tests of spinal fluid, brain metabolism, electrical activity, sleep, or disease-related biomarkers may be appropriate when the cause remains uncertain.

Clinicians also consider delirium, depression, medicine effects, substance use, and other conditions that can resemble cognitive decline.

Treatment and management

Treatment depends on the cause, the symptoms, and how much daily life is affected.

Potentially reversible contributors should be addressed when possible. This may include treating a thyroid disorder or vitamin deficiency, improving sleep, managing depression, treating infection, or reviewing medicines that can affect thinking. Medicines should not be stopped suddenly without professional advice.

Some progressive brain conditions have medicines that may temporarily help certain cognitive or behavioural symptoms. Selected people with early Alzheimer's disease may be considered for disease-targeting treatments after specialist testing. These treatments are not suitable for everyone and may require regular monitoring.

Practical support is often as important as medicine. It may include:

Safety planning should match the person's current abilities rather than the diagnosis alone. Driving, cooking, medicine use, wandering, falls, and access to weapons may need review.

People should be included in decisions as much as possible. Early discussion of financial arrangements, future care preferences, and who may make decisions later can protect the person's choices.

Family members and other caregivers may need education, respite, and emotional support. Behaviour changes are often easier to manage when pain, infection, constipation, hunger, noise, poor sleep, or an unfamiliar environment are considered first.

- Calendars, labels, alarms, pill organisers, and predictable routines
- Occupational therapy to make daily activities safer
- Speech and language therapy for communication difficulties
- Physical therapy for strength, walking, or balance problems
- Hearing and vision assessment
- Support for sleep, mood, nutrition, and social activity
- Help with transport, finances, personal care, or household tasks

Complications

Complications are more likely when cognitive difficulties interfere with judgment, movement, or self-care.

Possible problems include missed medicines, unpaid bills, scams, unsafe driving, falls, poor nutrition, dehydration, or getting lost. Communication problems can make pain and illness harder to recognise.

Progressive conditions may eventually affect walking, swallowing, bladder control, and the ability to perform personal care. Reduced mobility and swallowing problems can increase the risk of infection or injury.

An unfamiliar place, hospital admission, surgery, infection, or a new medicine can trigger delirium in someone with an existing neurocognitive disorder. This causes a sudden change from their usual state.

Mood symptoms, frustration, agitation, hallucinations, or sleep disturbance can also occur. These symptoms deserve assessment because they may reflect discomfort, illness, medicine effects, or a treatable mental health condition.

Prevention

Not every neurocognitive disorder can be prevented. There is no established way to guarantee prevention of inherited or degenerative brain conditions.

Reducing stroke and cardiovascular risk may lower the chance of some forms of cognitive

decline. Helpful measures include not smoking, remaining physically active when able, and managing blood pressure, diabetes, and cholesterol with appropriate care.

Protecting the head with seat belts, suitable helmets, and fall-prevention measures can reduce the risk of brain injury. Limiting harmful alcohol use and reviewing medicines that affect alertness may also reduce avoidable problems.

Treating hearing loss, staying socially engaged, and addressing depression or poor sleep may support day-to-day thinking. These steps support health but cannot promise that neurocognitive disorder will not develop.

Living with it and what to expect

The course depends mainly on the underlying cause. Symptoms caused by a medicine, nutritional deficiency, infection, depression, or another treatable problem may improve, although recovery is not always complete.

Cognitive changes after a brain injury or stroke may improve with recovery and rehabilitation, then become more stable. Other causes, including many degenerative brain conditions, tend to progress over months or years. The rate and pattern cannot be predicted precisely for one person.

Mild neurocognitive disorder does not always become major neurocognitive disorder. Some people remain stable, and some improve when contributing problems are treated. Regular follow-up can show whether abilities are changing.

Many people continue to enjoy relationships, hobbies, exercise, travel, and community life. Adjustments may be needed as complicated tasks become harder. Consistent routines and familiar surroundings can help preserve confidence and independence.

Follow-up commonly reviews thinking, function, mood, sleep, medicines, driving, falls, and caregiver needs. A new change should not automatically be blamed on the existing condition. Pain, infection, delirium, or another treatable problem may be responsible.

Planning ahead can reduce later stress. This may involve discussing support at home, legal and financial arrangements, preferred care, and the person's priorities while they can participate fully.

When to get medical help

Arrange a routine medical assessment if memory or other thinking changes are persistent,

worsening, or interfering with everyday activities. Earlier assessment can identify treatable contributors and allow time for support and planning.

Seek prompt medical advice for a noticeable change over days, new hallucinations, repeated falls, a major change in behaviour, or increasing difficulty eating, drinking, taking medicines, or staying safe.

Seek emergency help for:

Sudden symptoms should not be assumed to be part of a long-term neurocognitive disorder.

- Sudden confusion or a rapid change from the person's usual state
- New facial drooping, arm weakness, speech difficulty, or other stroke signs
- A seizure, collapse, severe head injury, or loss of consciousness
- Severe headache with new neurological symptoms
- Difficulty breathing or being impossible to wake
- Immediate risk of self-harm, harm to others, or unsafe wandering

Common questions

Is neurocognitive disorder the same as dementia?

Major neurocognitive disorder is broadly similar to what is commonly called dementia. Mild neurocognitive disorder describes a smaller decline that does not substantially remove independence.

Can neurocognitive disorder be cured?

Sometimes the cause can be treated and symptoms may improve. Examples include certain medicine effects, vitamin deficiencies, thyroid problems, infections, or depression. Many degenerative causes cannot currently be cured, but treatment and support can help with symptoms and daily life.

Does memory loss always mean neurocognitive disorder?

No. Stress, poor sleep, depression, pain, medicines, alcohol, hearing loss, and normal lapses can affect memory. A diagnosis requires evidence of decline from previous abilities and an assessment of its effect on daily life.

How quickly does it get worse?

There is no single timeline. Delirium develops quickly and is a different condition. Some neurocognitive disorders remain stable or improve, while progressive causes change over

years. Sudden worsening needs assessment for a new medical problem.

Can someone with neurocognitive disorder still live alone?

Some people with mild symptoms can live alone with reminders, safety measures, and regular support. Others need increasing help. The decision should be based on current abilities, home safety, available support, and the person's preferences.

Can a person with neurocognitive disorder still drive?

Some people with mild impairment can continue driving for a time, but problems with attention, judgment, vision, or reaction speed may make it unsafe. Local licensing rules apply, and a formal driving assessment may be useful.

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