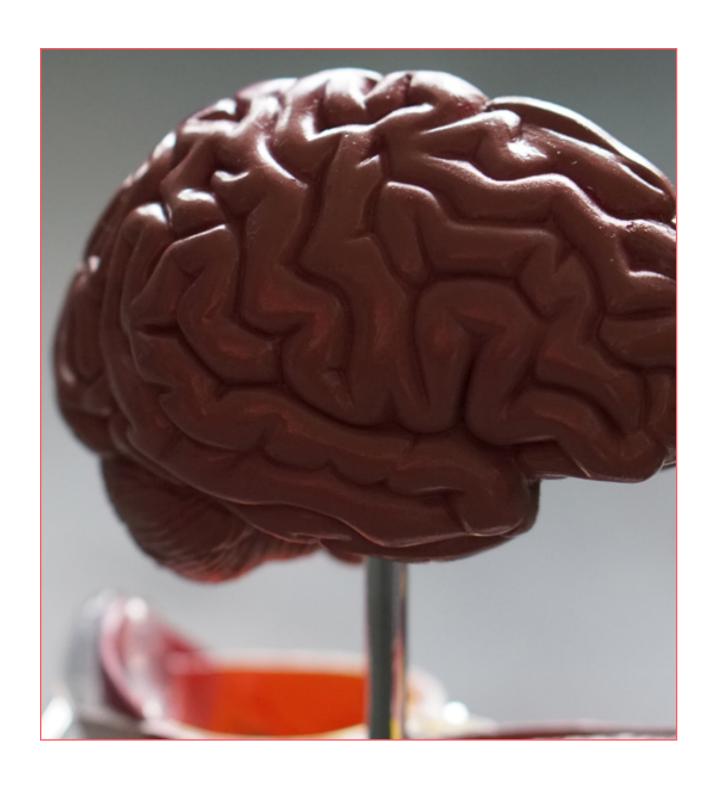


The School of Dementia®



# What is dementia?



# Read more about dementia

Dementia is not a single disease but a common term for many diseases that can cause dementia symptoms. The diseases affect the memory, the brain and a person's social abilities to such a degree that it affects their daily life.

In this article you can read about these topics:

- Dementia is a chronic disease
- Dementia symptoms
- When should I see a doctor?
- Dementia diseases
- How are you diagnosed with dementia?
- Complications
- Can dementia be prevented?

# Dementia is a chronic disease

Dementia is a common term for more than 200 diseases that affect the brain. Over time, the diseases become more serious and have more of an impact on the brain. All dementia diseases damage the cells in the brain. The damage to the brain cannot be repaired or stopped.

The brain consists of nerve cells that communicate with each other by sending messages back and forth between them. Dementia damages the nerve cells so that the messages cannot be sent correctly to and from the brain. The body and the brain cannot function as normal if the messages between the nerve cells are damaged or do not reach their destination.

Dementia is experienced very differently from person to person, regardless of the type of dementia disease they have or the part of the brain that is affected. The majority of people experience deteriorating memory. But issues with memory loss are not the same as having a dementia disease. There are many reasons why memory may deteriorate. It is therefore important to be examined by a doctor if you suspect that you or a relative has a dementia disorder.

# **Dementia symptoms**

The symptoms are different, depending on which dementia disease you have. The most common symptoms are:

# Memory loss

People with dementia may find it difficult to remember new information. They may get lost in places they know well and find it difficult to remember names. Relatives will often be the first to notice that the person with dementia appears more forgetful. For example, a person with the early signs of dementia may tell the same story many times and consistently forget where their keys, purse, wallet, glasses or telephone are.

#### **Brain and body**

Dementia diseases affect the brain and therefore how the brain functions. Tasks that were previously easy suddenly become difficult. The ability to concentrate deteriorates and it becomes difficult to plan or to pack a suitcase. Some people also find it difficult to orientate themselves in time and space, and may therefore start getting ready to go to work in the middle of the night – even though they have been retired for years. Some get lost easily even though they are only a few hundred meters from their own home. The confusion and helplessness that follows can be a very uncomfortable feeling which gives a sense of insecurity. In some cases, a location device can improve the sense of security for both the person with dementia and their relatives. However, there are some ethical and technical issues with using GPS units for people with dementia.

Shopping may also become a problem because making decisions is difficult. Just choosing what you need and paying for it becomes an impossible task.

It is also not uncommon for people with dementia to feel restless and have difficulty sitting still. Conversely, there are others who just want to be left in peace and will not participate in activities they otherwise usually enjoyed.

When the disease becomes more severe over time, there may be problems using the body because the signals from the brain do not function anymore. Some people find it difficult to walk, others need help eating. Fortunately, there are aids for people with dementia that can make everyday life easier.

#### **Communication**

People with dementia often tend to repeat themselves, and reading and writing can become very challenging activities. If it becomes difficult to find the right words or engage in conversations, some people with dementia will start to avoid spending time with other people. Poor self-esteem, anxiety, depression and mood swings are therefore not uncommon aspects of a dementia diagnosis.

However, it is possible to enjoy spending time with the person with dementia despite communication difficulties.

## Psychological symptoms

Personality may change as the brain is damaged. People who have previously been very extrovert may become introverted and not wish to see friends and family. Conversely, people who were previously reserved and did not say much, may suddenly become very social and talkative.

Unfortunately, there are also other risks, such as feelings of persecution, becoming very excited and angry without warning, or beginning to see and feel things that are not there in reality. Some people may also have trouble finding out how to behave in different situations. They may laugh loudly at funerals, pick their nose and belch during dinner or become sexually suggestive towards everyone in their vicinity.

# When should I see a doctor?

You should make a doctor's appointment if you or any of your relatives have problems with memory or other dementia symptoms. Certain diseases – such as depression – have symptoms that resemble the symptoms of dementia. It is therefore important that the doctor examines you or your loved ones as soon as there is a suspicion of dementia, so that the correct diagnosis can be made and the proper treatment started.

#### **Dementia disorders**

None of the most common dementia disorders are curable. On the contrary, they become more serious as time goes on. Treatment may mitigate or delay the development of some of the symptoms.

The treatment of dementia symptoms is very dependent on which disease is causing them. There are more than 200 dementia disorders. The five most common ones are:

#### Alzheimer's disease

Alzheimer's is the most common form of dementia disorder. More than half of all people with dementia suffer from Alzheimer's disease. Alzheimer's is a physical disease that alters the structures of the brain and the ability of brain cells to communicate with each other. The brain cells die in the end.

Researchers do not know why people are afflicted with dementia. A small proportion of those who get Alzheimer's have inherited the disease. Researchers think that the remainder are caused by the chemistry of the brain, but they do not know exactly what starts the disease.

The symptoms of Alzheimer's disease become clearer as time passes. Concentration, memory and communication skills deteriorate. It also becomes progressively harder to read, write and count, as well as to navigate and plan even small tasks.

There are medicines that can delay the development of Alzheimer's disease. At present, it is unfortunately not possible to prevent or cure the disease.

#### Vascular dementia

The second most prevalent dementia disorder is vascular dementia. The dementia disease occurs because of damage to the blood vessels that supply the brain with blood. The damage usually occurs as a result of blood clots, bleeding or oxygen deficiency in the brain.

The symptoms depend on where the brain has been damaged. Therefore, the symptoms of vascular dementia may vary a great deal from person to person. Amnesia is not as obvious in people with vascular dementia as it is in people with Alzheimer's disease. People with vascular dementia primarily experience that they think slower and have problems concentrating. Some may also experience a feeling of indifference and not want to do anything. As with Alzheimer's disease, people who have vascular dementia may also experience problems with language or have difficulty navigating.

The symptoms can be kept reasonably in check with the right medication, but the person with dementia will not function in entirely the same way as before the disease began.

Unfortunately, it is not uncommon for people with vascular dementia to suffer a depression. They may also experience serious mood swings and may have difficulty controlling crying and laughter. They may suddenly begin crying or laughing, even though they do not actually feel either sad or happy.

# Lewy Body dementia

People with Lewy Body dementia may have visions, sleepwalk, and have trouble concentrating and maintaining attention. In addition to the dementia symptoms, they are also affected by Parkinson's symptoms. For example, difficulty controlling their limbs, slow movements, stiff muscles and shaking.

The difficulty with maintaining attention and navigating may resemble the symptoms of Alzheimer's disease. However, unlike Alzheimer's disease, the symptoms of Lewy Body dementia can get much worse – but also become much more mild – in a very short time. The symptoms of Alzheimer's disease do not fluctuate – they only become more serious over time.

Researchers do not know what causes Lewy Body dementia. It is named after the deposits in the brains of people who died from Lewy Body dementia, Parkinson's disease and Alzheimer's disease. The deposits are called Lewy bodies, and they damage the brain cells.

A person with Lewy Body dementia can:

- Have a tendency to fall
- Drag their feet
- Have trouble swallowing
- Have difficulty sleeping due to very lifelike dreams and nightmares
- See and hear visions

Lewy Body dementia is incurable, but medicine can temporarily dampen the dementia symptoms.

#### Frontotemporal dementia

Frontotemporal dementia is also known as frontal dementia or frontotemporal lobar degeneration. It is an umbrella term for brain diseases that damage brain cells in the frontal lobes and the temporal lobes. The damage occurs in the two parts of the brain that are important for our personality, behaviour and language. The symptoms are therefore serious changes in personality, speech problems and psychiatric symptoms.

People with frontotemporal dementia often begin to behave very differently from usual and the changes become clearer as the illness worsens. The dementia leads to impulsive actions and no thought of the consequences of actions and remarks. Many become indifferent to other people and social norms. People with frontotemporal dementia often begin to drive much too fast, become very sexually suggestive, or start drinking or eating too much. On the other hand, memory remains relatively unaffected until much later in the illness.

#### Semantic dementia

Semantic dementia belongs to the same family as frontotemporal dementia. When the brain cells in the temporal lobes become damaged, words lose their meaning and general knowledge declines as the disorder worsens. The person with dementia forgets the names of things and how to use them.

The first symptoms are forgetting words and the names of objects if they are rarely used. Over time the person with dementia also begins to forget the meaning of completely ordinary words such as "book" or "coffee cup". In addition to having trouble remembering or finding the right words, they also find it difficult to understand the names of things and concepts. At some point it also becomes difficult to recognise things and people and remember their names.

Although it has a big impact on language, most people with semantic dementia are still able to repeat words and speak fluently in a normal tempo. Most are also good at remembering events.

Language is not the only area affected if the disease spreads to other parts of the brain. Changes in personality, behaviour and eating habits may then occur.

#### Rare dementia diseases

## Huntington's disease

The disease is caused by a hereditary genetic defect. Cells in the spine and certain cells in the brain are damaged and die. People are typically aged between 30 and 45 before the first symptoms appear. The disease affects personality, the ability to concentrate and memory. The physical symptoms are mainly agitation in the body, which can eventually develop into involuntary, jerking movements. People with the disorder often also have difficulty with their balance and slow, rigid movements.

## Traumatic brain injury

If you have been injured or have been involved in an accident where your brain was injured, you may suffer dementia symptoms. Depending on where the brain was injured, you may have problems with speech, memory loss, depression and also experience changes in personality. The symptoms often do not occur until several years after the head injury.

#### Creutzfeldt-Jakob disease

A variant of this rare brain disorder is hereditary. However, the majority of sufferers are infected with the disease by something they have eaten. The disease is very aggressive, so people quickly become very ill and suffer severe dementia before eventually dying from the disease. A known variant of Creutzfeldt-Jakob disease is the so-called 'mad cow disease'.

#### Parkinson's disease

Around every third person with Parkinson's disease develops dementia sooner or later. In addition to dementia symptoms, they suffer from tremors, stiff muscles and slow movements.

#### **Dementia-like conditions**

In some cases, it is possible to treat or stop the development of dementia and dementia-like symptoms. This could be when the cause is:

## Infections and disorders of the immune system

When the body tries to fight infections, the fever may cause dementia-like symptoms. Multiple sclerosis and other diseases of the immune system that attack nerve cells can also lead to dementia. If you are bitten by a tick and are unlucky enough to be infected with the Borrelia bacteria, you may also get dementia-like symptoms.

#### Metabolic issues

People with thyroid gland disorders who have a blood sugar level that is too low, too little or too much sodium and calcium, or have difficulty in absorbing vitamin B12 may develop dementia symptoms.

#### Lack of fluids and vitamins

If you do not make sure you drink enough or do not get enough vitamin D, B1, B6 or B12, you may experience symptoms similar to dementia.

#### Side effects from medications

Side effects from medication, drug hypersensitivity or a combination of medications may lead to dementia-like symptoms.

#### Subdural hematoma

Bleeding between the surface of the brain and the skull is often seen in elderly people who have fallen or have otherwise hit their head. The bleeding can cause pressure on the brain and symptoms reminiscent of dementia.

## Poisoning

Poisoning from heavy metals (such as lead) or toxins (pesticides, drug addiction or alcoholism) may cause dementia symptoms. The dementia symptoms can usually be eliminated by treating the poisoning.

#### Brain cancer

This is rarely seen, but dementia symptoms can also be caused by damage from cancer tumours in the brain.

## Oxygen deficiency

When the organs of the body do not get enough oxygen, a dementia-like condition occurs. Oxygen eficiency is most often caused by severe sleep apnoea, asthma or heart problems.

#### Normal pressure hydrocephalus

If the pressure in the brain becomes too great, you may have trouble walking, and you can also experience involuntary urination and amnesia. The symptoms will normally disappear when the pressure is relieved.

# **Dementia disorders**

A distinction is made between dementia diseases, rare dementia diseases and dementia-like disorders.

#### The most common dementia diseases are:

- Alzheimer's disease
- Vascular dementia
- Lewy Body dementia
- Frontotemporal dementia
- Semantic dementia, which is a variant of frontotemporal dementia

# Among the rarer dementia diseases are:

- Huntington's disease
- Traumatic brain injury
- Creutzfeldt-Jakob disease
- Parkinson's disease

# Some conditions are not dementia disorders, but cause symptoms that resemble dementia. The causes of the symptoms can be:

- Oxygen deficiency
- Brain cancer
- Poisoning
- Alcoholism
- Vitamin deficiency
- Metabolic disorders
- Dehydration
- Bleeding between the brain and skull
- Side effects from medications
- Infections and disorders of the immune system

# How are you diagnosed with dementia?

If you exhibit symptoms similar to the symptoms of dementia, you should visit your own doctor as quickly as possible. Some diseases and conditions may resemble dementia without actually being it. If treatment is begun quickly, dementia-like disorders are often treatable.

To find out if a person has dementia, the doctor asks about their symptoms. The doctor will also ask if there is anyone in the family who has had similar symptoms. Mental and physical health is also examined. Among other things, the doctor tests concentration and memory. The doctor also asks about mood swings as well as changes in behaviour and personality. The doctor will often order blood tests and perhaps also a brain scan or X-rays of the chest to find out if there are diseases of the heart and lungs.

If the first examinations point towards you having dementia, your doctor will contact a dementia unit or a memory clinic. They have special experience in examining and treating dementia.

#### **Complications**

Dementia disorders can affect much more than the memory. The whole body can be affected. Therefore, dementia disorders can also lead to:

#### Poor nutrition

Many people with dementia begin to eat less or stop eating altogether. They therefore end up lacking in vitamins and minerals. Towards the end of the illness, many people with dementia also struggle to chew and swallow, making it even harder to get the nutrients the body needs.

#### Pneumonia

If you have difficulty swallowing, the risk of getting food in your lungs increases. This may cause oxygen deficiency and pneumonia.

# Hygiene and medicine

As the dementia disorder gets worse, it may become more difficult to shower, get dressed, use the toilet and brush hair and teeth without help. It may also be difficult to take medicine as often as you should and in the way your doctor instructed.

# Safety

Some everyday chores can become dangerous for people who have dementia. For example, driving, cooking or going for a walk alone, because the risk of wandering and being unable to find the way home increases.

# Can dementia be prevented?

Dementia disorders can affect much more than the memory. The whole body can be affected. Therefore, dementia disorders can also lead to:

- Eat a healthy and varied diet.
- Get enough vitamins. For example vitamin D may come from your diet, dietary supplements and sunlight.
- Drink plenty of fluids.
- Get quality sleep. Talk to your doctor if you snore a lot, gasp or stop breathing while you sleep.

- Stop smoking.
- Limit how much alcohol you drink.
- Visit your doctor regularly to keep track of cholesterol levels and blood pressure.
- Maintain a stable blood sugar level if you have diabetes.
- Keep physically active and exercise the brain, for example by walking, gardening, singing, music, art, reading or other hobbies.
- Visit friends and family. Social activities stimulate the brain.

There is no evidence that jigsaw puzzles are good brain gymnastics. On the other hand, scientists have found that you the brain can be stimulated by learning a new language, because this involves many parts of the brain and therefore helps to keep it healthy.