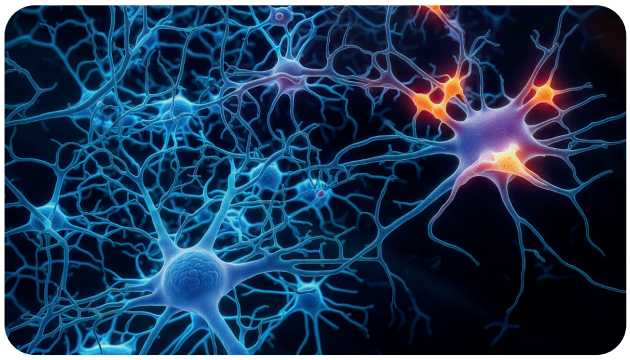
Neurodegenerative disorders



Neurodegenerative disorders are a group of medical conditions characterised by the progressive degeneration of nerve cells (neurons) in the brain and spinal cord. These diseases affect memory, movement, cognition, and behaviour, significantly impacting a person's daily life. The most common neurodegenerative disorders include Alzheimer's disease, Parkinson's disease, Huntington's disease, and amyotrophic lateral sclerosis (ALS). While the exact causes are often complex, they generally involve a combination of genetic, environmental, and lifestyle factors. These conditions are chronic, meaning they worsen over time, and currently, there is no definitive cure, making early diagnosis and management critical.

■ Symptoms and diagnosis

The symptoms of neurodegenerative disorders vary depending on the disease but often include memory loss, confusion, difficulty with movement, tremors, rigidity, and changes in mood or personality. For example, Alzheimer's disease typically starts with memory problems and cognitive decline, whereas Parkinson's disease is known for tremors and slowed movement. Diagnosis usually involves clinical evaluations, neurological exams, brain imaging (such as MRI or PET scans), and sometimes genetic testing. Early recognition of symptoms is essential for planning treatment, providing support, and slowing disease progression.

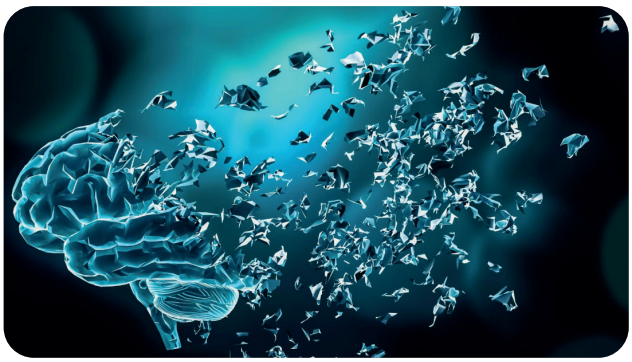
to target: *mirare*
tracer: *tracciante*
underlying: *sottostante*

■ Causes and risk factors

Neurodegenerative disorders are caused by complex interactions between genetics and environmental influences. For instance, mutations in certain genes may increase the risk of Alzheimer's or Huntington's disease, while exposure to toxins or head injuries can contribute to the onset of Parkinson's. Ageing is also a major risk factor, as the brain becomes more vulnerable to cellular damage over time. Additionally, lifestyle factors such as diet, exercise, and cognitive engagement may influence disease risk and progression. Researchers continue to study the underlying mechanisms, including the accumulation of abnormal proteins and oxidative stress, which lead to neuronal death.

■ Treatment and management

Although there is no cure for most neurodegenerative disorders, treatments aim to manage symptoms, slow progression, and improve quality of life. Medicines can help control movement problems, memory loss, and behavioural symptoms. Physical therapy and speech therapy are often used to maintain mobility and daily functioning. Emerging research explores gene therapy, stem cell therapy, and novel drugs targeting abnormal proteins. Support from caregivers, lifestyle adjustments, and social engagement also play a crucial role in managing these conditions, ensuring patients maintain independence and mental well-being for as long as possible.



1 Summarise the information of the text into a similar table.

	Details
Neurodegenerative disorders	
Common types	
Causes	
Symptoms	
Diagnosis	
Treatment goals	
Treatment methods	
Additional support	

2 Read the text and answer the questions.

Alzheimer's Disease

Alzheimer's disease is a progressive neurodegenerative disorder that primarily affects the brain's memory and thinking abilities. It is the most common cause of dementia, a condition characterised by a decline in cognitive function that interferes with daily life. Alzheimer's usually develops slowly, starting with mild memory loss, difficulty remembering recent events, and trouble finding the right words. As the disease progresses, individuals may experience confusion, disorientation, changes in mood and personality, and problems with reasoning and decision-making. The exact cause of Alzheimer's is not fully understood, but it is associated with the accumulation of abnormal proteins in the brain, such as beta-amyloid plaques and tau tangles, which damage neurons and disrupt communication between them. Genetics, age, and lifestyle factors can also increase the risk of developing the disease. Currently, there is no cure for Alzheimer's, but only treatments focusing on managing symptoms and slowing progression. Medications can help improve memory and cognitive function, while therapies such as cognitive training, physical activity, and social engagement support overall well-being. Caregiver support and structured routines are also essential for maintaining safety and quality of life. Alzheimer's disease has a profound impact not only on patients but also on families and society, highlighting the importance of research, early diagnosis, and comprehensive care strategies.

Adapted from: *https://www.nhs.uk/conditions/alzheimers-disease/*

1. What is Alzheimer's disease?
2. What are the early symptoms of Alzheimer's disease?
3. How does Alzheimer's progress over time?
4. What causes Alzheimer's disease?
5. Is there a cure for Alzheimer's disease?
6. What types of support help Alzheimer's patients?

3 Translate the following terms into English.

1. Sclerosi .....
2. Peggiorare .....
3. Valutazione .....
4. Trattamento .....
5. Esposizione .....
6. Insorgenza .....
7. Accumulo .....
8. Impegno .....
9. Logopedia .....
10. Garantire .....