

## **Motor Nerve Disease**

### **Introduction:**

Rarely occurring motor neurone disease gradually weakens various areas of the nervous system. This results in weakened muscles that frequently show apparent wasting. A condition called motor neurone disease, often known as amyotrophic lateral sclerosis (ALS), develops when specialised nerve cells called motor neurones in the brain and spinal cord stop functioning properly. We call this neurodegeneration. Important muscle functions like gripping, walking, speaking, swallowing, and breathing are controlled by motor neurons.

### **Motor Nerve Disease:**

People with motor neurone disease will find some or all of these tasks to be increasingly challenging as their condition worsens. They might eventually turn into impossibilities. What stops motor neurones from functioning properly is unclear. A family history of either motor neurone disease or the related disorder frontotemporal dementia occurs in roughly 5% of cases. Family history of motor neuron illness is what causes this. In the majority of these situations, it has been determined that defective genes play a significant role in the emergence of the disorder. Since there is no one test for motor neurone disease, the diagnosis is primarily dependent on the expert judgement of a brain and nervous system specialist (a neurologist).

### **Symptoms:**

An experienced neurologist can usually make the diagnosis of motor neurone disease with little to no doubt, but occasionally specialised testing are required to rule out other disorders that share some of the same symptoms. Motor neurone disease symptoms normally start out on one side of the body initially and worsen over the course of weeks and months.. Weakened grips are a common early sign that might make it difficult to pick up or hold objects a weak shoulder that makes raising the arm challenging weak ankle muscles can produce "foot drop" dragging of the leg and slurred speech (dysarthria) Usually, the condition is not uncomfortable. As the damage

increases, other bodily parts begin to experience the symptoms, and the situation worsens. A person with motor neuron illness can eventually lose their ability to move. Breathing, swallowing, and speaking may also become exceedingly challenging. Up to 15% of the time, dementia that can alter behaviour and personality is linked to motor neurone disease. Frontotemporal dementia is the term for this condition, which frequently manifests early in motor neurone disease. The affected person might not be aware of changes in their personality or behaviour. About two out of every 100,000 persons in the UK are affected by motor neurone disease each year. In the UK, there are about 5,000 persons living with the illness. Although it is relatively rare, the illness can afflict adults of all ages, including teenagers. Although most people with the illness don't have symptoms until their 60s, it's typically identified in patients over the age of 40. Men are slightly more impacted than women are. For the time being, motor neurone disease is incurable.

### **Medicine and Cure:**

Making the patient feel comfortable and ensuring the highest quality of life while compensating for the progressive loss of physiological functions including mobility, communication, swallowing, and breathing are the goals of treatment. For instance, a feeding tube, also known as a gastrostomy, aids in maintaining nutrition and general comfort while considerably easing the symptoms of breathing difficulties and weakness. To stop excessive drooling, medication may be used, if necessary. Riluzole is a drug that has only slightly increased patients' overall survival rates; it is not a cure and does not slow the progression of the disease. For the majority of persons, motor neurone disease significantly shortens their lifespan. Three years following the onset of symptoms, around half of persons who have the illness can expect to live. Some people, however, may survive up to 10 years, and in extremely unusual cases, even longer.

### **Conclusion:**

Before the diagnosis is made, living with the disease is a terrible prospect and a very difficult reality. It's not always as grim as people think, though. Many people can maintain some level of independence for a sizable portion of the condition's course with strong community and professional support, and they can also enjoy a quality of life they might not have thought was

conceivable at the time of their diagnosis. For someone with motor neurone disease, passing away is frequently painless and takes place in their own home. A person with the illness will typically pass away while they are asleep as the final stage of their respiratory muscles' progressive deterioration. Despite some of the affected individuals having difficulties swallowing, they won't suffocate to death.

**Source :**

[1] Medical News Today 10 November 2021.