

What is Ataxia?

INFORMATION FROM PATIENTS AND FAMILIES
A NATIONAL ATAXIA NETWORK INITIATIVE
MOVEMENT DISORDERS SOCIETY OF INDIA

- The term **ataxia** is derived from the Greek terms “a” and “taxia”, which means “without order”.
- It is a symptom of damage to the nervous system, particularly the cerebellum and or its connections. The cerebellum is a part of the brain that plays a crucial role in controlling muscle movement, coordination, and balance. It is located at the base of the brain and is connected to it through the brainstem.
- Ataxia is characterized by a loss of voluntary muscle control and coordination, resulting in poor balance, unsteady or imbalanced walking, clumsy limb movements or limb incoordination, difficulty with fine motor skills, speech disturbances, and eye movement abnormalities.
- In addition to the above features, other organs of the body such as the heart, nerves, hearing, muscle strength and other may be affected.
- There are various causes, both genetic and acquired which can cause ataxia. The onset of ataxia can be acute (occurring within minutes to hours), subacute (occurring over a few days), or chronic (occurring over months to years).
- It can be progressive, where the symptoms continue to worsen with time and the patient can become wheelchair-bound or bedbound in the advanced stage. Very rarely, the ataxia can be episodic.

The main symptoms of ataxia include:

- **Unsteady gait and balance:** The patient will have difficulty walking with a tendency to sway on either side while walking. The patient has difficulty navigating through narrow passages, with worsening unsteadiness and difficulty turning. This increases the risk of falls.
- **Limb coordination:** The patient will have difficulty with fine motor skills such as writing, buttoning and unbuttoning, wearing shoes, and wearing pants. There is clumsiness in limb movements. There may be difficulty in mixing food, eating, shaking while drinking from a glass, or reaching for objects, where the fingers may go back and forth.
- **Speech:** The speech becomes slurred or clumsy, which is called “dysarthria”. There may be some explosive character in his speech, or it may appear as though the patient is scanning each syllable of the word. It may be challenging for others to understand what the patient is saying.
- **Eyes:** There may be difficulty in eye movement. The movements can be slow and may take more time to move to either side. It may be associated with abnormal head movements that precede the eye movements. The patient may exhibit abnormal jerkiness of eye movements when asked to look to either side. This is described as “nystagmus”. The patient may also complain of blurred vision.
- **Other symptoms:** There may be associated difficulties in swallowing with occasional choking episodes. Some patients can also have emotional disturbances.