

Symptom-Based Treatment in Ataxia (1/2)

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

Ataxia may be associated with several problems, apart from imbalance. The following list summarizes the treatment for some of these symptoms. Please note that none of these medications should be taken without the advice of your medical practitioner.


















Motor symptoms

- *Imbalance while walking:* Unfortunately there is no effective medication for Imbalance while walking but exercise helps.
- *Tremor:* Various medications are available for tremor in ataxia. These include propranolol, primidone, topiramate, levodopa, dopamine agonists, clonazepam or diazepam, and botulinum toxin injections.
- *Difficulty in speaking and swallowing:* Speech problems require speech therapy and speech rehabilitation exercises. **Please refer to the leaflet on 'Speech and Swallowing issues.'**
- *Muscle cramps or spasms:* Drugs like baclofen, tizanidine may help.

Nonmotor symptoms

- *Sleep disturbances:* Clonazepam if insomnia or REM sleep behavior disorder (Acting out dreams physically during sleep)
- *Fatigue and pain:* Amantidine, modafinil, low dose antidepressants for fatigue; Gabapentinoids and low dose antidepressants for chronic pain.

- *Dizziness or vertigo:* Several medications are available for these symptoms, including baclofen, ondansetron, clonazepam, gabapentin, meclizine etc. For specific ataxias such as episodic ataxias, other medications like acetazolamide or 4- aminopyridine may be useful.
- *Sensory symptoms:* These include tingling or burning, which are related to peripheral nerve involvement, medications such as pregabalin, gabapentin, tricyclic antidepressants, duloxetine may be helpful.
- *Hearing problem:* The cause of hearing abnormality must be determined to design specific treatment. Consult an Ear, Nose and Throat (ENT) specialist.

ATAXIA: SYMPTOM-BASED TREATMENT			
Targeted management of motor and non-motor symptoms to improve function and quality of life			
MOTOR SYMPTOMS		NON-MOTOR SYMPTOMS	
SYMPTOMS	TREATMENT APPROACH	SYMPTOMS	TREATMENT APPROACH
 Gait and balance difficulty	<ul style="list-style-type: none"> • Physiotherapy (balance, gait training, coordination exercises) • Assistive devices (e.g., cane, walker, orthotics) • Fall prevention strategies 	 Anxiety / depression	<ul style="list-style-type: none"> • Psychological support / CBT • Antidepressants or anxiolytics • Regular physical activity, social engagement
 Limb incoordination (dysmetria, dysidiadochokinesia)	<ul style="list-style-type: none"> • Occupational therapy • Task-specific coordination training • Adaptive strategies for daily activities 	 Sleep disturbances	<ul style="list-style-type: none"> • Sleep hygiene education • Melatonin (if needed) • Treat coexisting pain, anxiety or restless legs
 Dysarthria (speech difficulty)	<ul style="list-style-type: none"> • Speech therapy • Communication strategies • Augmentative and alternative communication if needed 	 Fatigue	<ul style="list-style-type: none"> • Energy conservation strategies • Regular exercise (as tolerated) • Address sleep, mood and medical contributors
 Nystagmus / abnormal eye movements	<ul style="list-style-type: none"> • Treat underlying cause if possible • Prism glasses or contact lenses • Medications (e.g., gabapentin, memantine) in select cases 	 Dysphagia / swallowing difficulty	<ul style="list-style-type: none"> • Swallowing assessment • Diet modification (texture, consistency) • Swallowing therapy • Aspiration precautions
 Tremor	<ul style="list-style-type: none"> • Medications (e.g., propranolol, primidone, clonazepam) • Occupational therapy • Weighted utensils, adaptive tools 	 Cognitive difficulties	<ul style="list-style-type: none"> • Cognitive evaluation • Cognitive rehabilitation • Routine, memory aids, organizational strategies
 Spasticity / muscle stiffness	<ul style="list-style-type: none"> • Physiotherapy, stretching • Oral medications (e.g., baclofen, tizanidine) • Botulinum toxin injections (focal) • Orthotics, positioning 	 Bladder / bowel dysfunction	<ul style="list-style-type: none"> • Bladder training, timed voiding • Medications for overactive bladder or constipation • Hydration, diet, pelvic floor therapy
 ADDRESS THE UNDERLYING CAUSE Treat the genetic, metabolic, immune or structural cause whenever possible.	 MULTIDISCIPLINARY CARE Neurologist, physiotherapist, occupational therapist, speech therapist, psychologist, dietitian, nurse and social worker.	 MONITOR AND ADJUST Regular follow-up to monitor symptoms, treatment response and functional goals.	 GOAL Maximize independence, safety and participation in daily life.
 Treatment is individualized. Focus on function, participation and quality of life.			

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- **Vision problem:** Ataxia may be associated with vision problems due to diverse causes, like refractive errors, cataract, retinal or optic nerve problems. Consult an ophthalmologist for detailed assessment and treatment.
- **Bladder issues:** Bladder abnormalities may be the result of overactive bladder or underactive bladder. Overactive bladder leads to issues such as urinary urgency, frequency and urge incontinence. Botulinum injection treatment locally into the bladder may be used for severe cases. Medications for overactive bladder include anticholinergics, mirabegron etc. For underactive bladder, cholinergic agents may be useful.
- **Bowel issues:** Constipation can be a significant problem associated with ataxia. Strategies to tackle constipation include increased fluid and fibre intake, and physical activity. Medications including stool bulking agents as well as laxative may be useful.
- **Autonomic dysfunction:** Orthostatic hypotension, or fall in blood pressure on standing, may lead to symptoms such as giddiness or lightheadedness on standing. Initial strategies for treatment include increasing fluid intake, taking frequent but small meals, avoiding prolonged standing and sudden movements to achieve standing. If orthostatic hypotension is severe or persists despite these measures, medications may be considered including fludrocortisone, midodrine, pyridostigmine, and droxidopa.

- **Mood issues:** Antidepressant and anti-anxiety medications may be prescribed for mood problems.
- **Skeletal problems:** Some ataxias like Friedreich ataxia lead to skeletal problems like scoliosis (bending of the spine) which may require surgery for correction.
- **Cardiac issues:** Some ataxias such as Friedreich ataxia can lead to enlargement of the heart (cardiomyopathy) or abnormal rhythm of the heart (arrhythmias) which may require specific medications or device implantation. A cardiac specialist is consulted for these problems.

ATAXIA: SYMPTOM-BASED TREATMENT

Targeted management of motor and non-motor symptoms to improve function and quality of life

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