

What is MSA?

- Multiple system atrophy (MSA) is a rare, degenerative neurological disease that causes autonomic dysfunction, parkinsonism, and movement difficulty
- It was also known as Shy-Drager Syndrome
- MSA causes atrophy (deterioration) in the cerebellum, basal ganglia, and brainstem
- MSA usually occurs in older adults, with an average onset of 55, and has a poor prognosis – most patients live about 10 years after the onset of symptoms, with death usually due to pulmonary embolism, apnea, or recurrent infections
- Some genes have been linked, as well as certain environmental or lifestyle risks
- MSA is caused by abnormal alpha-synuclein protein, which clump up in parts of brain and spinal cord and destroy the nerve cells (something that also occurs in Parkinson's Disease)

What are the symptoms?

- Severe orthostatic hypotension, fainting, light-headedness
- Urinary retention and constipation
- Motor control symptoms – tremors, rigidity, loss of coordination and balance
- Impotence in males
- Sleep abnormalities
- Speech or swallowing difficulties
- There are 2 types of MSA described – one that has more Parkinson's like movement and the other causes cerebellar ataxia – which causes more balance problems, as well as speech and eye coordination
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For more information visit
MSA Coalition at
<https://www.multiplesystematrophy.org/>
Vanderbilt University at
<https://ww2.mc.vanderbilt.edu/adc/4791>

Additional sources,
<https://ghr.nlm.nih.gov/condition/multiple-system-atrophy#diagnosis>

How is it diagnosed?

- Diagnosis may be difficult, as there is no definitive test that can be done on a living patient, and because it is similar to Parkinson's. True diagnosis can only be made during autopsy
- Tilt table test to look for orthostatic hypotension and other autonomic function tests (sweat tests)
- Bladder and GI function tests
- MRI

How is it treated?

- There is no cure for MSA, only symptom management
- Symptoms management may include blood pressure medication to treat either orthostatic hypotension or supine hypertension
- **Some patients need to self-catheterize if unable to urinate**
- **Medications for constipation**
- **Medications and therapy for gait, balance, and coordination**
- **BiPAP for sleep apnea**