DISEASE SUMMARIES and SYMPTOMS *at a glance*

Multiple System Atrophy (MSA)

MSA is a degenerative disorder of the brain with no cure at present.

The difficulty in diagnosing MSA has led to the creation of red flags to act as warning signs that may raise clinical suspicion of MSA.

- Rare neurodegenerative disease affecting multiple brain circuits ("systems"), especially movement control, balance, and autonomic reflexes.
- First described in the 1960s as Shy-Drager syndrome.
- Pathologically classified as a synucleinopathy (accumulation of the protein alpha synuclein)
- Subclassified into three types, each of which includes elements of the others:
  MSA-P (Parkinsonian) – striatonigral degeneration implies Parkinsonism with some degree of cerebellar dysfunction.
  MSA-A (autonomic) – Shy-Drager syndrome reflects a predominance of autonomic failure
  MSA-C (cerebellar) – olivopontocerebellar atrophy indicates primarily cerebellar defects with minor degrees of parkinsonism.
- Three to four cases per 100,000 people.
- Average age of onset is 54 years, younger than PSP or CBD.
- More common in men
- Life expectancy averages 7 years after symptom onset, with a wide range.
- No cure or way to slow disease progression, but some of the symptoms respond to medication or other therapies.

Signs and Symptoms

- Rigidity
- Several types of tremor can occur.
- Myoclonic jerks (very rapid, isolated jerks that can occur anywhere in the body.)
- Bradykinesia
- Freezing of gait
- Early postural instability and falls
- Orthostatic hypotension
- Erectile dysfunction
- Bladder dysfunction: urgency, frequency, incontinence
- Constipation
- Speech and swallow difficulties – mixed dysarthria tends to emerge earlier in MSA than PD, is more severe, and deteriorates more rapidly
- REM Behavioral Disorder (RBD) – acting out dreams while sleeping due to lack of atonia
- Gait and limb ataxia

curePSP®
UNLOCKING THE SECRETS OF BRAIN DISEASE®

Phone: +1 347-294-2873 | Email: info@curepsp.org | www.curepsp.org
1216 Broadway | 2nd Floor | New York, NY 10001 | USA
Facebook.com/curepsp.foundation | Twitter: @CurePSP