









IS IT LEMS OR MG?

Test your knowledge of the symptoms of Lambert-Eaton myasthenic syndrome (LEMS)

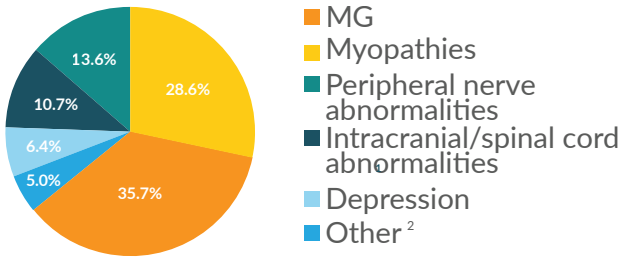
Indicate with a check mark whether the symptoms below are a sign of LEMS or myasthenia gravis (MG).

| SYMPTOMS ¹ | LEMS | MG |
|--|--------------------------|--------------------------|
|  Symmetrical muscle weakness | <input type="checkbox"/> | <input type="checkbox"/> |
|  Asymmetrical muscle weakness | <input type="checkbox"/> | <input type="checkbox"/> |
|  Caudal-to-cranial pattern of spread | <input type="checkbox"/> | <input type="checkbox"/> |
|  Early and prominent oculobulbar involvement | <input type="checkbox"/> | <input type="checkbox"/> |
|  Later and mild oculobulbar involvement | <input type="checkbox"/> | <input type="checkbox"/> |
|  Diminished or absent tendon reflexes | <input type="checkbox"/> | <input type="checkbox"/> |
|  Autonomic dysfunction | <input type="checkbox"/> | <input type="checkbox"/> |
|  Symptoms worsen with exercise | <input type="checkbox"/> | <input type="checkbox"/> |

MISDIAGNOSIS IS COMMON

Myasthenia gravis (MG) is the most common misdiagnosis of LEMS²

Common LEMS Misdiagnoses



More than 1/3 of misdiagnosed LEMS patients were **initially diagnosed as having MG²**



58% of patients were misdiagnosed at least once in a 2011 cohort of adult patients with LEMS²

FIRDAPSE is a potassium channel blocker indicated for the treatment of Lambert-Eaton myasthenic syndrome (LEMS) in adults.

CONTRAINDICATIONS

FIRDAPSE is contraindicated in patients with:

- A history of seizures
- Hypersensitivity to amifampridine phosphate or another aminopyridine

WARNINGS AND PRECAUTIONS

Seizures: FIRDAPSE can cause seizures. Consider discontinuation or dose-reduction of FIRDAPSE in patients who have a seizure while on treatment. FIRDAPSE is contraindicated in patients with a history of seizures.

Hypersensitivity: If a hypersensitivity reaction such as anaphylaxis occurs, FIRDAPSE should be discontinued and appropriate therapy initiated.

ADVERSE REACTIONS









The most common (> 10%) adverse reactions are: paresthesia, upper respiratory tract infection, abdominal pain, nausea, diarrhea, headache, elevated liver enzymes, back pain, hypertension, and muscle spasms.

To report SUSPECTED ADVERSE REACTIONS, contact Catalyst Pharmaceuticals at 1-844-347-3277 (1 844-FIRDAPSE) or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

Please see enclosed full Prescribing Information in pocket.

DIFFERENTIATING LEMS FROM MG

Keys to a differential diagnosis of LEMS vs myasthenia gravis

| LEMS ³ | | MG ³ |
|---|---|--|
| Ages of onset: 35 and 60 |  | Ages of onset: 35 and 50 |
| Symmetrical muscle weakness |  | Asymmetrical muscle weakness |
| Caudal-to-cranial pattern of spread |  | Craniocaudal pattern of spread |
| Mild, late-onset oculobulbar involvement |  | Early and prominent oculobulbar involvement |
| Absent or diminished Tendon reflexes |  | Tendon reflexes typically preserved |
| Autonomic dysfunction |  | No autonomic dysfunction |
| Transient improvement with exercise |  | Weakness worsens with exercise |
| Labs: Auto-antibodies to VGCC |  | Labs: Auto-antibodies to AChR or MuSK |

90%

of MG cases include early
oculobulbar involvement
(vs 5% in LEMS)

CATALYST NO-COST ANTIBODY DIAGNOSTIC TESTING

A free program to help your patients find answers

Catalyst Pharmaceuticals, in collaboration with a national diagnostic lab provider, offers free anti-VGCC antibody testing for adult patients with symptoms suggestive of LEMS. The test is available to adult patients who already have a negative AChR antibody test or an equivocal EMG test for LEMS.



Testing for the presence of anti-VGCC antibodies can confirm a diagnosis of LEMS^{4,5,6}



The presence of anti-VGCC antibodies can be detected in up to 90% of patients with LEMS^{4,5,6}



To request a free test, contact your Catalyst representative or visit [FreeLEMStest.com](https://www.FreeLEMStest.com)

REFERENCES

1. Merino-Ramirez MÁ, Bolton CF. Review of the diagnostic challenges of Lambert-Eaton syndrome revealed through three case reports. *Can J Neurol Sci.* 2016;43(5):635-647.
2. Titulaer MJ, Lang B, Verschuuren JJ. Lambert-Eaton myasthenic syndrome: from clinical characteristics to therapeutic strategies. *Lancet Neurol.* 2011;10(12):1098-1107.
3. Merino-Ramirez MÁ, Bolton CF. Review of the diagnostic challenges of Lambert-Eaton syndrome revealed through three case reports. *Can J Neurol Sci.* 2016;43(5):635-647.
4. Harms L, Sieb JP, Williams AE, et al. Longterm disease history, clinical symptoms, health status, and healthcare utilization in patients suffering from Lambert Eaton myasthenic syndrome: results of a patient interview survey in Germany. *J Med Econ.* 2012;15(3):521-530.
5. Zaleski NL, Lennon VA, Lachance DH, et al. P/Q- and N-type calcium-channel antibodies: oncological, neurological, and serological accompaniments. *Muscle Nerve.* 2016;54(2):220-227.
6. Lennon VA. Serologic profile of myasthenia gravis and distinction from the Lambert-Eaton myasthenic syndrome. *Neurology.* 1997;48(suppl 5):S23-S27.