Diagnosis of MG: Pitfalls and Pearls

Yoon-Ho Hong, MD, PhD

Department of Neurology, Seoul National University College of Medicine, Seoul Metropolitan Government Boramae Medical Center, Seoul

yhh@snu.ac.kr

Disclosures

No conflicts of interest to disclose in relation to this lecture

Learning objectives

01	Recognize the classic and atypical clinical presentations of MG
02	Identify common diagnostic pitfalls and sources of missing or misdiagnosis of MG in real-world clinical practice
03	Integrate clinical, laboratory, and electrophysiological findings to formulate a timely and accurate diagnosis

Key messages

- MG is a heterogenous group that present in variable ways, making diagnosis challenging due to overlap with other conditions
- Many clinical signs of fatigable weakness are neither sensitive nor specific in isolation for diagnosing MG
- Over-reliance on serological tests and electrophysiological evaluation in isolation can lead to misdiagnosis
- Be vigilant for "red flags" that point away from MG diagnosis and prompt additional investigations
- Ultimately, a secure diagnosis of MG is achieved through the combined interpretation of the clinical presentation, physical examination, antibody testing, imaging, electrophysiology, and response to treatment

References

Shadi El-Wahsh, et al, Neuromuscular junction disorders: mimics and chameleons, Pract Neurol, 2024

Rodolico C, Parisi D, Portaro S, et al. Myasthenia Gravis: Unusual Presentations and Diagnostic Pitfalls. J Neuromuscul Dis 2016

Kwon YN et al, Clinical pitfalls and serological diagnostics of MuSK myasthenia gravis. J Neurol. 2023

Yoganathan K, Stevenson A, Tahir A, et al. Bedside and laboratory diagnostic testing in myasthenia. J Neurol 2022

Lamb CJ, Rubin DI. Sensitivity and specificity of repetitive nerve stimulation with lower cutoffs for abnormal decrement in myasthenia gravis. Muscle Nerve 2020