

Steroid Use, Toxicity, and Monitoring in Patients With Generalized Myasthenia Gravis: A Survey of Neurologists in the United States



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INTRODUCTION

- Generalized myasthenia gravis (gMG) is a rare, chronic autoimmune disorder characterized by muscle weakness resulting from pathogenic immunoglobulin G (IgG) autoantibodies targeting the postsynaptic neuromuscular junction and disrupting neuromuscular transmission¹⁻⁴
- Global prevalence is ≈12.4 per 100,000 persons⁵
- As with other chronic autoimmune disorders, immunosuppressant treatment for gMG is usually lifelong⁶
- Corticosteroids (CSs) are recommended as a first-line treatment for MG^{1,7}
 - Adverse effects (AEs) can be severe and toxicity monitoring for patients given high-dose or long-term CSs is critical⁸

OBJECTIVE

To survey CS prescribing patterns of board-certified neurologists and assess provider comfort and familiarity with monitoring CS toxicity in patients with gMG

METHODS

- 15-minute, cross-sectional online survey deployed in November and December 2023
- Survey enrolled 200 US neurologists (neurologists from Vermont excluded)
- > 101 answered for gMG and 99 for CIDP (see poster #306 for CIDP data)
- Respondents had to meet the following criteria:
- Be board certified in neurology, in practice in the US for ≥2 years since residency, and have treated or consulted in the past year on ≥10 patients with gMG who had been on a CS dose ≥10 mg for ≥1 month

SUMMARY AND PERSPECTIVE

- Although most neurologists reportedly monitor and manage CS toxicity in patients with gMG, only about half reported using guideline(s) to do so
- Current MG treatment guidelines emphasize use of lowest dose to control symptoms, but do not include specific recommendations on dosing, duration, or monitoring for toxicities
- Clearer guidance on how to administer CSs and manage toxicities in patients with gMG would be welcomed by neurologists and have potential for benefit to patient care

RESULTS

- 101 neurologists who met criteria estimated:
 - > ≈60% of their patients with gMG are being treated with CSs
 - ≈40% of their patients are being treated with nonsteroidal immunosuppressant therapy (NSIST)
- Less than 50% are able to taper down to ≤10 mg/day in <6 months
- 52% of neurologists reported using recommendations from guidelines to make clinical decisions on monitoring CS toxicity
 - ➤ However, 34% endorsed use of a nonexistent guideline (Guideline for Systematic Surveillance of Steroid Safety [GSSS])
- Neurologists' top 5 strategies for managing CS toxicities are:
 - Dose adjustment/tapering (80%)
 - > Lifestyle modifications, eg, diet, exercise (48%)
 - > Symptomatic treatment of specific AEs (48%)
 - ➤ Addition of NSISTs (46%)
 - ➤ Referral to other specialists, eg, endocrinologist, nephrologist (39%)
- The top parameters neurologists considered when monitoring for CS toxicities are:
 - ➤ Blood glucose levels (81%)
 - Weight gain (75%)
 - ➤ Blood pressure (66%)
 - ➤ Bone mineral density (57%)
 - Ocular exam (eg, for cataracts) (43%)
 - Psychological/behavioral changes (34%)
- Neurologists said the greatest obstacles in monitoring for CS toxicity are:
 - ➤ Balancing efficacy and toxicity (64%)
 - ➤ Patient compliance and communication (47%)
 - ➤ Coordination of care (39%)
 - ➤ Time constraints (33%)
 - ➤ Lack of consensus or standardized guidelines (28%)

RESULTS

Table 1. Respondent Characteristics

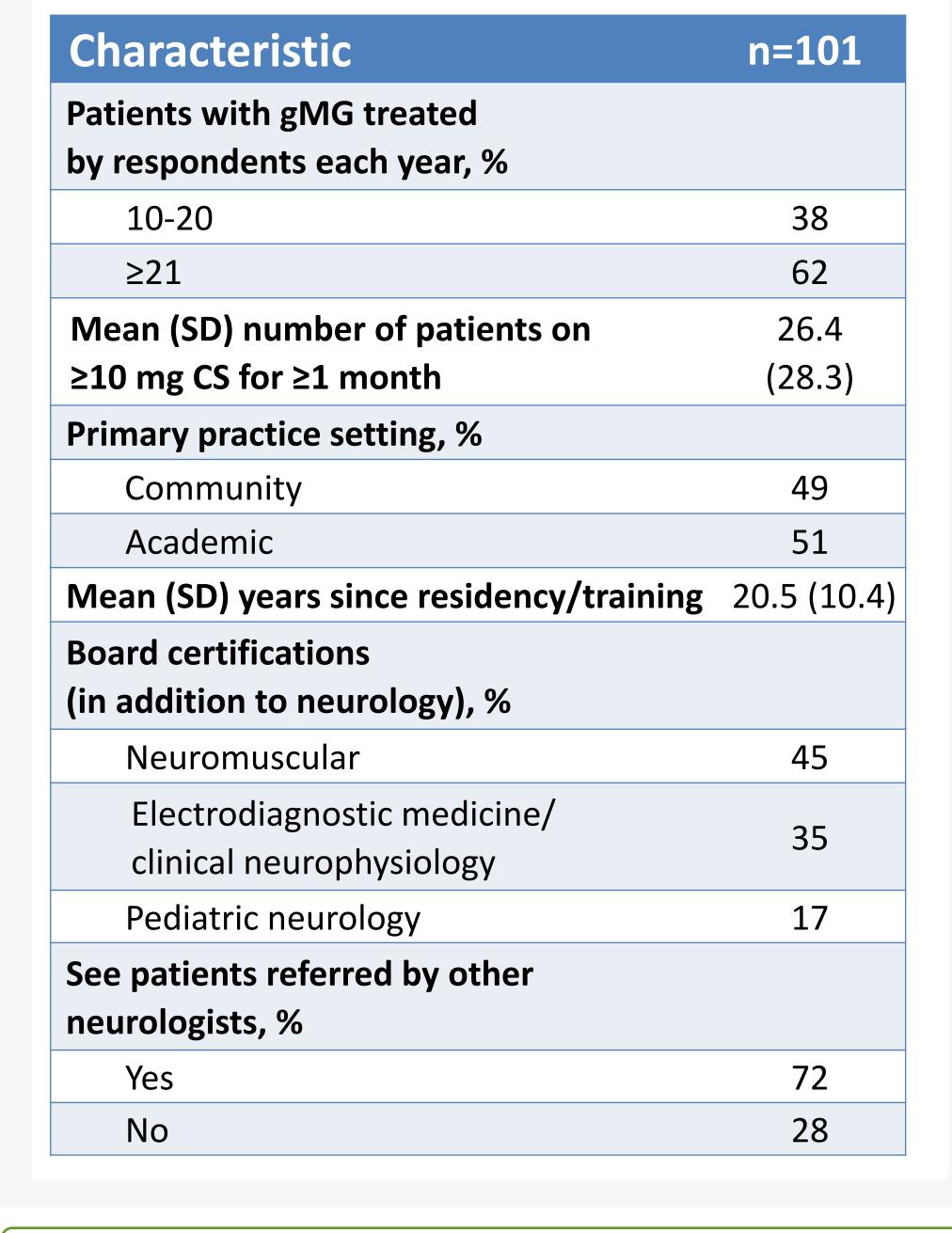


Figure 1. Chronic, Long-Term Prednisone-Equivalent CS Dose Considered Well Tolerated (n=101)

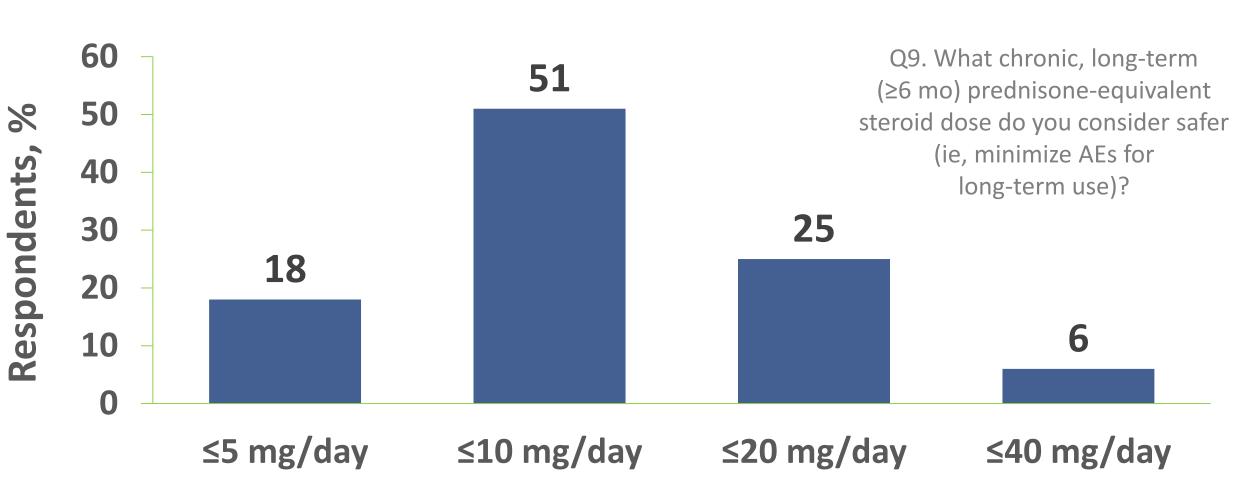


Figure 2. Familiarity With Potential for CS Toxicities (n=101)

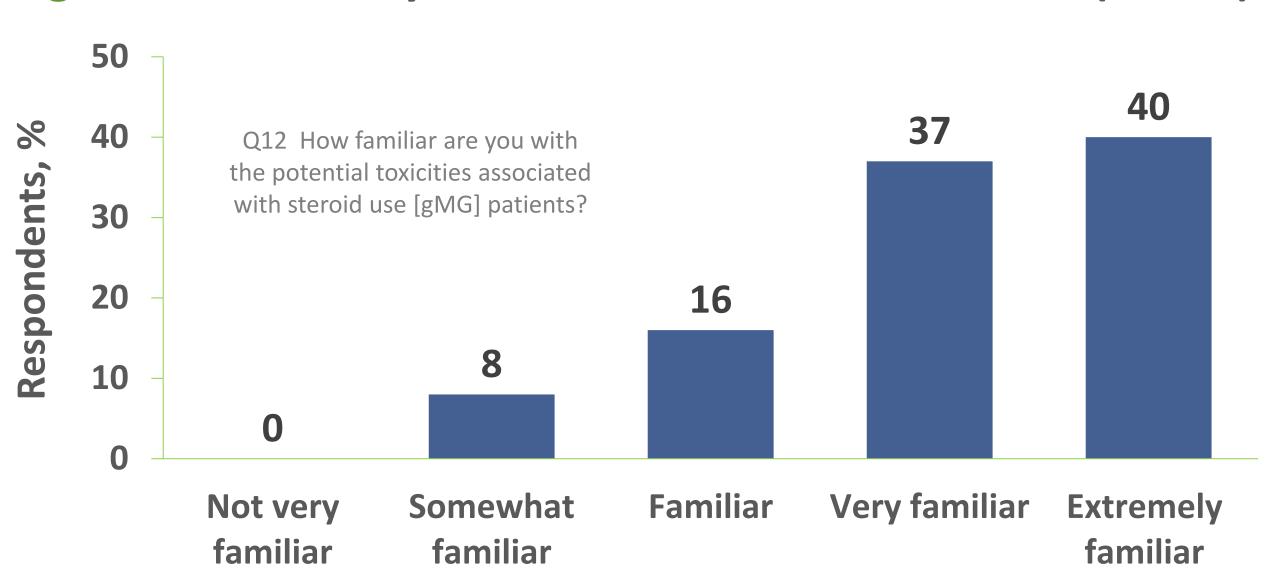


Figure 3. Most-Common AEs With Long-Term CS Use (n=101)

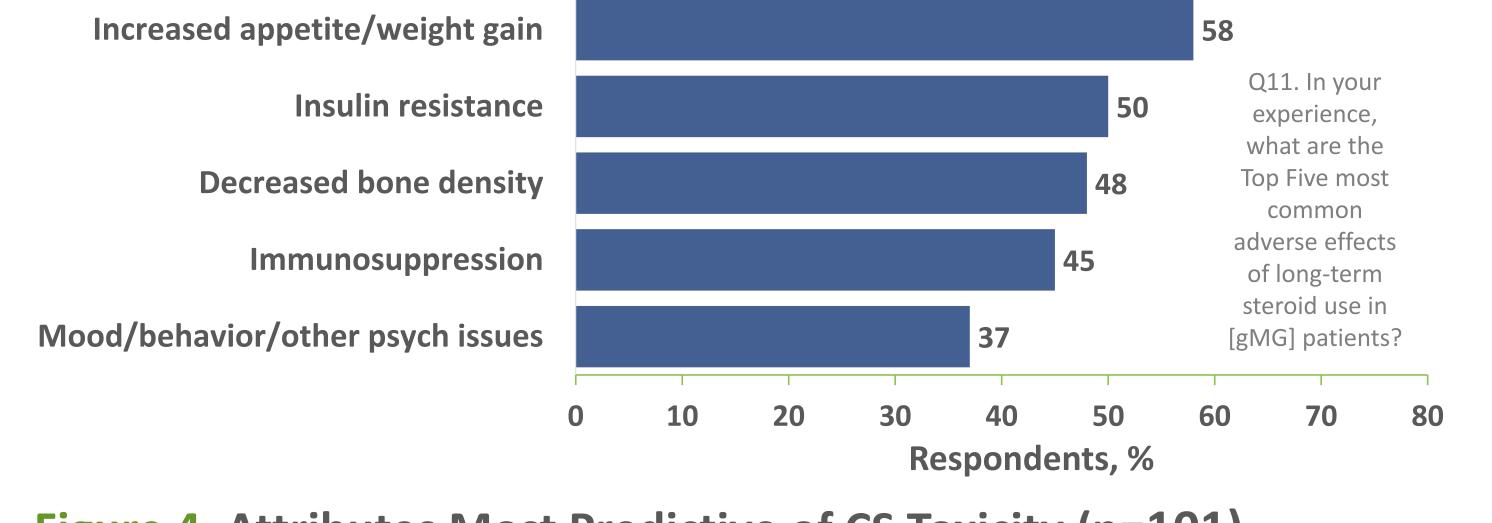
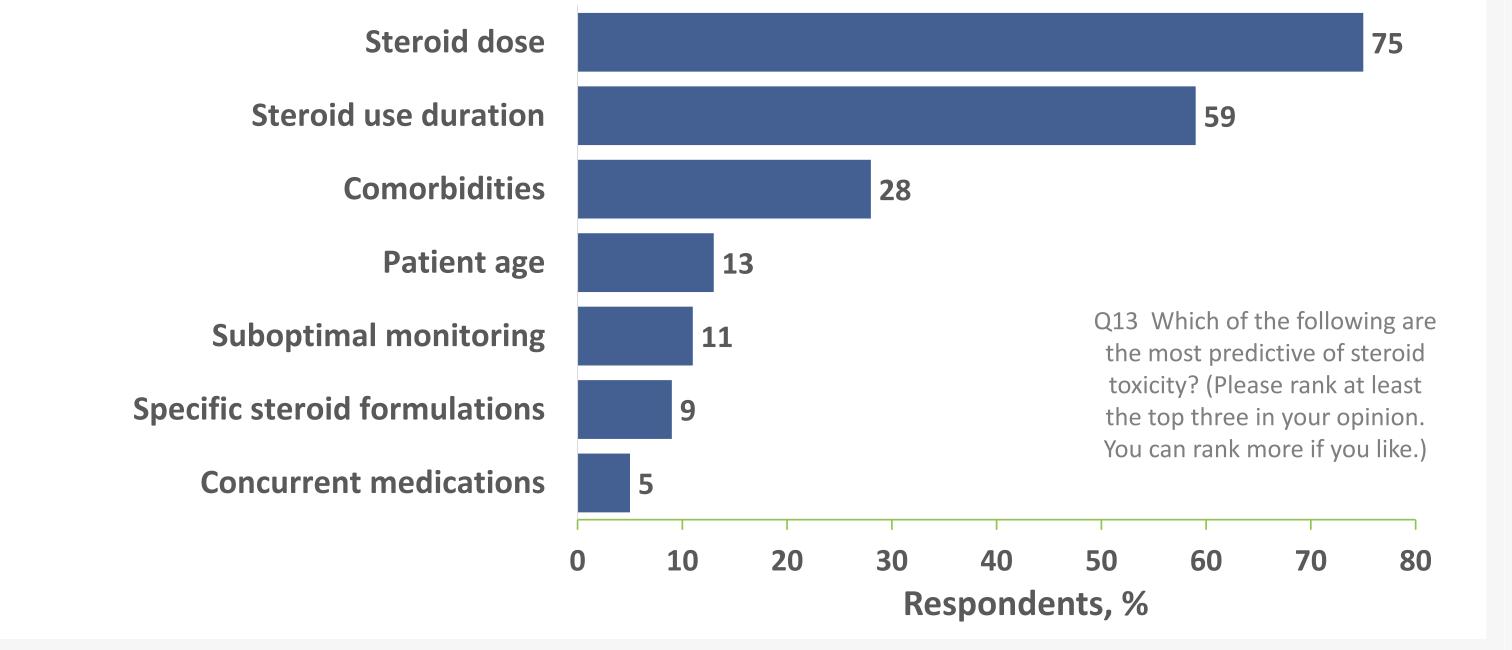


Figure 4. Attributes Most Predictive of CS Toxicity (n=101)



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