Steroid Use, Toxicity, and Monitoring in Patients With Chronic Inflammatory Demyelinating Polyneuropathy: A Survey of Neurologists in the United States

Gil Wolfe, MD[1]; Neelam Goyal, MD[2]; Deborah Gelinas, MD[3]; Tom Hughes, PhD[3]; Vijayaraghava TS Rao, PhD[3]; Paul Andrew Nisbet, PhD[4]; John Stone, MD[5]; Pushpa Narayanaswami, MD[6]

[1]University at Buffalo Jacobs School of Medicine and Biomedical Sciences, State University of New York, Buffalo, NY, USA; [2]Stanford Neuroscience Health Center, Palto Alto, CA, USA; [3]argenx, Boston, MA, USA; [4]One Research, Mt. Pleasant, SC, USA; [5]Massachusetts General Hospital/Harvard Medical School, Boston, MA, USA; [6]Beth Israel Deaconess Medical Center/Harvard Medical School, Boston, MA, USA

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INTRODUCTION

- Chronic inflammatory demyelinating polyneuropathy (CIDP) is a rare, autoimmune peripheral nervous system disorder that is characterized by progressive or recurrent motor or sensory symptoms, decreased or absent tendon reflexes, signs of demyelination on nerve conduction studies, and elevated protein levels in cerebrospinal fluid[1-3]
  - Prevalence of up to ≈7.7 cases per 100,000 person-years[4]
- Patients with CIDP may experience muscle weakness and fatigue, pain, and sensory disturbances[1,5]
- Primary treatment is corticosteroids (CSs), as recommended by the European Academy of Neurology/Peripheral Nerve Society (EAN/PNS) CIDP international guidelines, even as they acknowledge that significant adverse effects (AEs) are possible with long-term CS treatment[6]
  - CIDP guidelines recommend prophylactic calcium and bisphosphonate treatment in patients on CSs[6]

OBJECTIVE

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

METHODS

- 15-minute, cross-sectional online survey deployed in November and December 2023
- Survey enrolled 200 US neurologists (neurologists from Vermont excluded)
  - 99 answered for CIDP and 101 for gMG (see poster #235 for MG 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 ≥3 patients with CIDP who had been on a CS dose ≥10 mg for ≥1 month

SUMMARY AND PERSPECTIVE

- **Although two-thirds of neurologists reported following guideline(s) to manage CS use in their patients, EAN/PNS guidelines do not specify CS dosing or duration, nor appropriate monitoring for CS toxicity**
- **There is ongoing need for guidance on managing CSs and monitoring toxicity in patients with CIDP**

RESULTS

- **99 neurologists who met criteria estimated:**
  - 58% of their patients with CIDP are being treated with CSs
  - 44% of their patients are being treated with nonsteroidal immunosuppressant therapy (NSIST)
- **43% of neurologists consider CS dose ≤10 mg/day (prednisone equivalent) well tolerated; 32% consider 20 to 40 mg/day well tolerated for long-term use (≥6 months)**
- **50% of their patients are able to taper down to ≤10 mg/day in <6 months**
- **55% of neurologists reported being very/extremely familiar with CS toxicities, but <10% personally order lab tests**
- **>80% of neurologists said they are the one monitoring CS-related toxicity; 42% said they monitor in conjunction with patients' primary care provider**
- **Among neurologists (n=42) who responded to the question, the top psychological/behavioral changes that clue them into possible CS toxicity in their patients are:**
  - Mood swings (36%)
  - Irritability (24%)
  - Mania (24%)
  - Sleep disorders (19%)
- **Neurologists' top 5 strategies for managing CS toxicities are:**
  - Dose adjustment/tapering (77%)
  - Lifestyle modifications, eg, diet, exercise (51%)
  - Prophylactic treatment (49%)
  - Addition of NSISTs (48%)
  - Treatment of AEs (48%)
- **Neurologists said the greatest obstacles to CS toxicity monitoring in their patients are:**
  - Balancing efficacy and toxicity (61%)
  - Patient compliance and communication (54%)
  - Coordination of care (42%)
  - Time constraints (40%)
  - Lack of consensus or standardized guidelines (39%)
- **85% of the neurologists said a tool for systematically monitoring CS toxicity would be valuable, very valuable, or extremely valuable**

RESULTS

Table 1. Respondent Characteristics

Characteristic	n=99
Patients with CIDP treated by respondents each year, %	
10-20	56
≥21	44
Mean (SD) number of patients on ≥10 mg CS for ≥1 month	15.6 (18.4)
Primary practice setting, %	
Community	48
Academic	51
Mean (SD) years since residency/training	18.1 (10.6)
Board certifications (in addition to neurology), %	
Neuromuscular	20
Electrodiagnostic medicine/ clinical neurophysiology	21
Pediatric neurology	8
See patients referred by other neurologists, %	
Yes	66
No	34

Figure 1. Chronic, Long-Term Prednisone-Equivalent CS Dose Considered Well Tolerated (n=99)

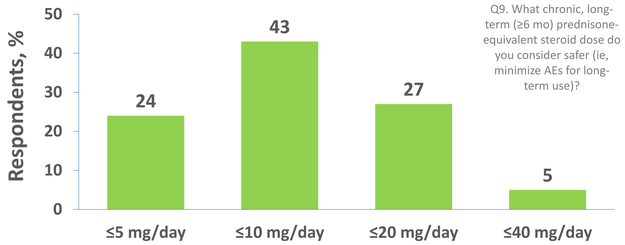


Figure 2. Familiarity With Potential for CS Toxicities (n=99)

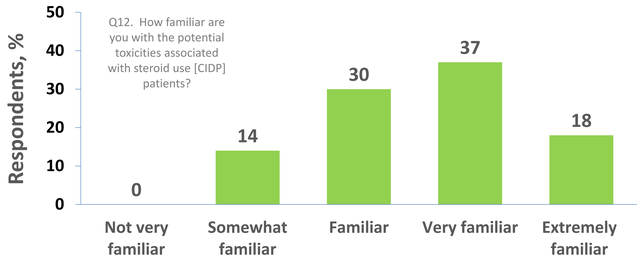


Figure 3. Most-Common AEs With Long-Term CS Use (n=99)

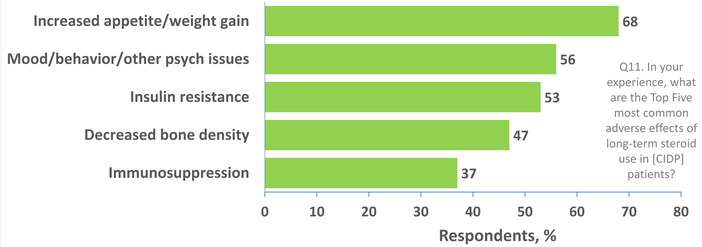
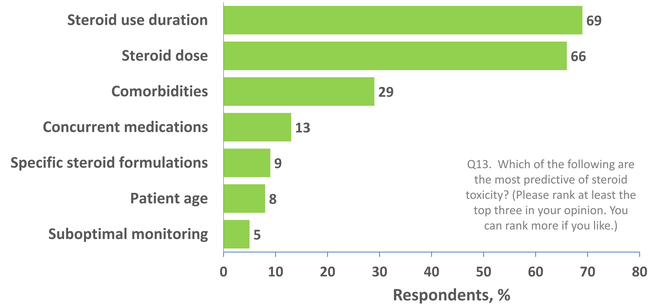


Figure 4. Attributes Most Predictive of CS Toxicity (n=99)



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