Patient Perception of Disease Symptom Maintenance While Using Subcutaneous Immunoglobulin for Neuropathic Disorders

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Introduction

Immunoglobulin (Ig) is a primary therapy for immune-mediated neuropathy disorders such as chronic inflammatory demyelinating polyneuropathy (CIDP) and myasthenia gravis (MG). Ig is administered either as an intravenous (IV) or subcutaneous (SC) therapy, but only certain Ig products have FDA approval for the treatment of these disorders. SCIg therapies are not currently FDA-approved for these disorders. SCIg therapy is an alternate treatment option that has a favorable side effect profile; it also increases a patient's independence with treatment.

Rationale

There is limited experience and published data on the use of SCIg for maintenance dosing for immune-mediated neuropathies. The purpose of this study was to look at compliance and symptom management in a small population of patients receiving SCIg in the home for a neurological diagnosis.

Methods

A retrospective chart review was conducted at a branch of a national home infusion company. Between January 2012 and May 2015, a clinical progress report (CPR) was performed by the pharmacist every 30–90 days. The CPR asks patients their perception of common neuropathy symptom changes, as well as therapy compliance and adverse reactions over the last month.

Data Collected

- Height
- Weight
- Gender
- Diagnosis
- Dose and Frequency (grams and mg/kg)
- Compliance history (missed doses, delayed doses, and incomplete doses)
- Symptom maintenance (increase or decrease in difficulty speaking, swallowing, visual disturbances, balance/ambulatory issues, and tingling/numbness/sensation)
- Adverse drug reactions (infusion reactions, skin reactions, other adverse events, and significant adverse events)
- If patient discontinued therapy, then reason for discontinuation was documented

Results

Table 1: Results	
Total Patients	5
Female	5
Male	0
Average Age at the Time of Study (Years)	52
Average Weekly Dose (Grams)	32.8
Average Weekly Dose (mg/kg)	442.6
Dose by Diagnosis (mg/kg)	
Small Fiber Neuropathy	641
Idiopathic Neuropathy	529
CIDP	223
Myasthenia Gravis	546
Stiff Person Syndrome	274
Average Length of Treatment (Months)	23.2
Therapy Compliance	
Missed	0
Delayed	0
Incomplete	0

Chart 1. *Incidence of Adverse Infusion Reactions*

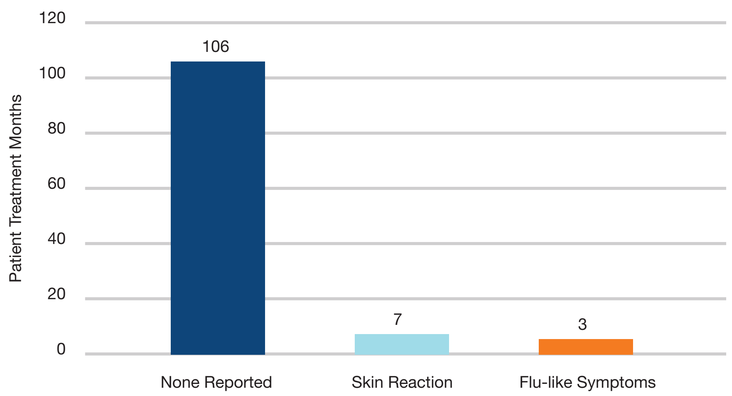
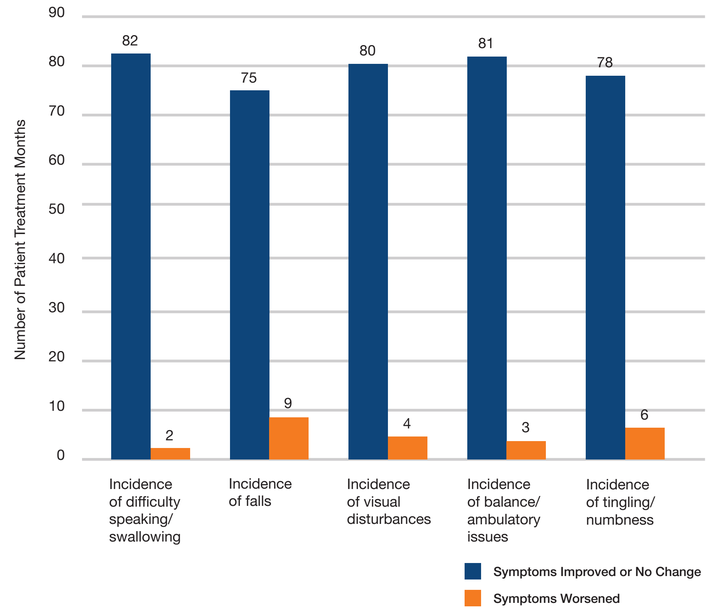


Chart 2. *Neuropathy Symptom Maintenance on SCIg*



Conclusions

- This study was designed to examine infusion compliance and patient perception of symptom maintenance while on SCIg therapy.
- Patients showed good compliance, few side effects, and no serious adverse reactions
- Patients reported symptom stability, with no change in symptoms during more than 70% of their months on service
  - » Patient reported symptom improvement was limited to a single patient reporting a decrease in numbness and tingling
- Two patients stopped therapy during the time of the chart review. Both discontinued therapy by request, feeling that they did not have a significant enough improvement or control of symptoms to justify the cost of the therapy. 15/24 (63%) of the incidences of worsening symptoms were recorded in these 2 patients
  - » Both patients were being treated for diagnoses (small fiber and idiopathic) without clear strong links to an immune mediated cause
- This data suggests that patients can maintain symptom stability while on SCIg for immune mediated neuropathies
- Further studies with a larger patient population, more consistent data, and objective clinical endpoints would allow for better assessment of SCIg in patients with immune-mediated neuropathic disorders.