Subcutaneous Immunoglobulins (SCIg) in responders to Intravenous Immunoglobulins (IVIg) with Chronic Inflammatory Demyelinating Polyradiculoneuropathy (CIDP) and Multifocal Motor Neuropathy (MMN)

Authors: (1) Karine Viala, (1) Rabab Debs, (1) Pauline Reach, (2) Diane Bracquart, (2) Nabil Moumane, (1) Thierry Maisonobe
Institution(s): (1) APHP-Hôpital Pitié-Salpétrière - Département de Neurophysiologie, 75013 Paris - France, (2) CSL Behring France – Medical Affairs Department, 75015 Paris - France

INTRODUCTION

High-dose IVIg is an effective therapy for CIDP and MMN. After long-term treatment, venous access becomes difficult and alternative needs to be found. SCIg has been shown effective in MMN and CIDP when administered twice or thrice-weekly. The main reason to switch from IVIg to SCIg is a difficult venous access.

METHODS

This is a retrospective analysis of a series of 11 patients with CIDP (4) and MMN (7) switched from IVIg to SCIg (4 women, 7 men).

RESULTS

Patients were diagnosed from 8±5 years. IVIg were the first line treatment, excepted for one treated initially with Methylprednisolone.

Treatment duration with IVIg was 6±5 years at 2 g/kg every 8±4 weeks.
Patients were hospitalized to receive IVIg for 3.3±1.4 days per course.

The reasons to switch from IVIg to SCIg were the need to travel to hospital (6), venous access problems (3), high-doses IVIg (1), intolerance to IVIg and need to travel to hospital (1) (Table 1).

Table 1: Reasons to switch from IVIg to SCIg	
Need to travel to hospital	n=6
Venous access problem	n=3
High-doses	n=1
Intolerance to IVIg and need to travel to hospital	n=1

SCIg was initiated at the hospital 15 to 21 days after the last IVIg administration.
SCIg was administered at home from 1 to 3 days per week (mean 1.8±0.8 days) using Crono pumps. (Fig 1)

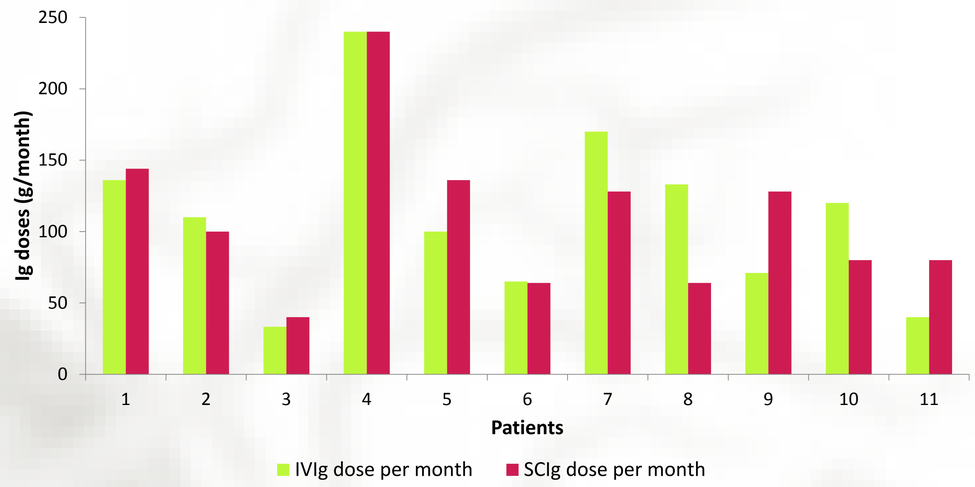
Fig 1: Crono pumps

The weekly dose was calculated as the dose of IVIg divided by the IVIg treatment interval in weeks, rounded up or down to the nearest whole number of vials.
Patients received a mean weekly dose of 25±13 g which represent a mean monthly posology at 1.3 g/kg±0.4.

The monthly dose of Ig has been:

- increased for 3 patients (patient 5, 9 and 11)
- unchanged for 5 patients (patient 1, 2, 3, 4 and 6)
- decreased for 3 patients (patient 7, 8 and 10). (Fig2)

Fig2: IVIg vs SCIg doses for each patient



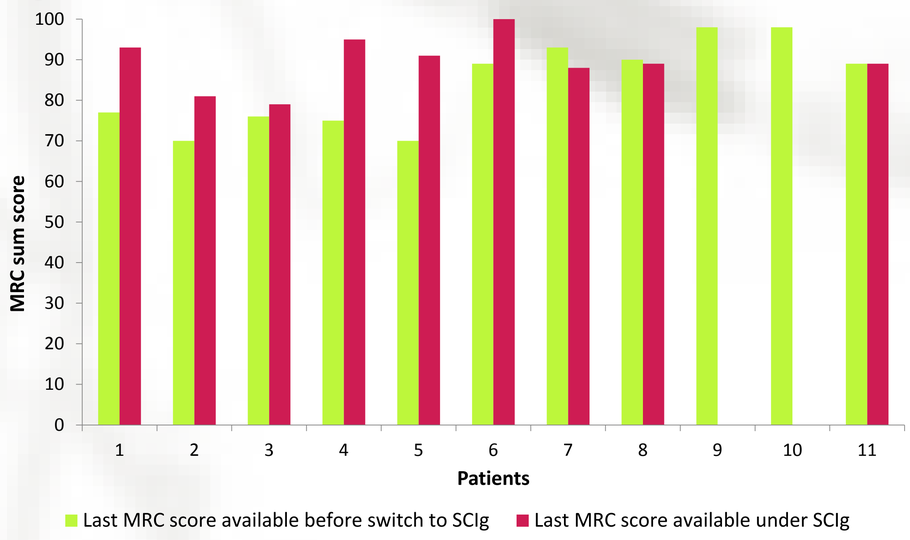
Among these 11 patients, one required an IVIg bolus 1 month after SCIg initiation and another needed regular IVIg bolus to maintain a high dose at 4g/kg/month.

20% concentrated SCIg was well tolerated. Some patients experienced induration at injection site without any consequence.

Patients were followed for a mean of 19±19 months [range 1–64] after starting SCIg (1 switched recently).

The MRC sum score was stable for 3 patients and improved for 6 in which it was observed an increase of 14±7 points. In 2 patients there are no available MRC sum score. (Fig 3).

Fig 3: Evolution of MRC sum score



CONCLUSION

Among these 11 patients, nine continued on regular SCIg.
2 patients stop SCIg, one have been weaned from IgG treatment, and the other one have been worsened because of his metastatic bone cancer.
SCIg had similar efficacy and well tolerated compared with IVIg.

Biotherapies for Life™ CSL Behring