Case Study: Successful Transition from Subcutaneous Immune Globulin Therapy to Intravenous Immune Globulin Therapy in Two Patients with Primary Immunodeficiency

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1. Advanced Infusion Care 2. Bio Products Laboratory, Ltd., Elstree, UK

RESULTS

Table 1. Summary of Clinical Events Pre- and Post-Transition to IVIG

<table>
<thead>
<tr>
<th>Patient No.</th>
<th>Patient #1</th>
<th>Patient #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
<td>68 Years</td>
<td>44 Years</td>
</tr>
<tr>
<td>Body Weight</td>
<td>95 kg</td>
<td>77.3 kg</td>
</tr>
<tr>
<td>PI</td>
<td>CVID</td>
<td>CVID</td>
</tr>
<tr>
<td>Comorbidities</td>
<td>Chronic urticaria tract infection</td>
<td>Rheumatoid arthritis, Intermittent peripheral neuropathy, Lyme disease</td>
</tr>
</tbody>
</table>

Pre-Transition IgG Therapy

- SCIG 20% 13 g weekly (545 mg/kg/4 weeks), initiated 3/12/2021: IVG 35 g, Q3 weeks (2015)
- SCIG 20% 10 g weekly (504 mg/kg/4 weeks), initiated 4/14/2021

Pre-Transition Clinical Status

<table>
<thead>
<tr>
<th>Level</th>
<th>483 mg/dL (1/4/2021)</th>
<th>534 mg/dL (2/8/2021)</th>
</tr>
</thead>
</table>

No adverse experiences

Reason for Change to IVIG

Patient noted problems with manual dexterity, expressed concern over her ability to self-infuse SCIG

Post-Transition IgG Therapy

<table>
<thead>
<tr>
<th>IVIG Regimen</th>
<th>10% IVIG 40 g (20 g/200 mL) Q4 weeks, initiated 6/3/2021</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Difference in Monthly IgD Dose</th>
<th>Post-Transition Clinical Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 g reduction/4 weeks with IVIG</td>
<td>Patient remained stable with steady-state trough IgG levels within normal limits and reports no adverse experiences</td>
</tr>
</tbody>
</table>

| Steady-state IgG levels: | 783 mg/dL (8/12/2021) | 935 mg/dL (2/22/2022) |

10% IVIG 30 g (10 g/100 mL) Q4 weeks (357 mg/kg/4 weeks), initiated 11/7/2022

10 g reduction/4 weeks with IVIG

Patient remained stable on IVIG, reports no adverse effects experienced with SCIG, and said he felt that he did better on IVIG

Quality of life was “very good” with no complaints noted on RN’s assessment during monthly infusion visits

RESULTS (Continued)

Two patients in the Advanced Infusion Care database were included in this analysis.2 Both were adults with PI (common variable immunodeficiency [CVID]) who had been receiving SCIG therapy in 2021 and subsequently transitioned to IVG therapy with follow-up extending into 2022 (Table 1).

- The transition from SCIG to IVG was observed to meet both patients’ individual needs:1
  - The concern of Patient #1 about inability to self-infuse SCIG due to a problem affecting manual dexterity was eliminated by transitioning to IVG.
  - The adverse experiences noted by Patient #2 during SCIG therapy were resolved following this patient’s request to transition to IVG therapy.
- IVG was well tolerated by both patients.2
- Dosage reductions were reported in transitioning from SCIG to IVG: 12 g reduction per 4 weeks for Patient #1 and 10 g reduction per 4 weeks for Patient #2.

DISCUSSION

- The data support the successful transition of two patients receiving a 20% SCIG product to a 10% IVG product, with fewer grams required for appropriate treatment on a monthly basis.
- Both patients have remained stable on IVG therapy since the transition from SCIG.
- In both cases, patient preference was accommodated and resulted in improved patient satisfaction.

CONCLUSIONS

- This report, based on the experiences of two patients with PI, highlights the importance of recognizing patient preference and tolerability when choosing IgG therapy.
- Transitioning from SCIG to IVG may provide clinical benefits for individual patients.

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References