Intravenous Immunoglobulin as Adjunctive Therapy in Relapsing Remitting Multiple Sclerosis: A Novel Approach to Improving Quality of Life and Reducing Fatigue

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Relapsing remitting multiple sclerosis is an autoimmune neurological condition, frequently associated with reduction in energy, mental clarity, and quality of life that may affect a patient's ability to work and live fulfilled lives. Approximately 80% of MS patients are affected by lack of energy; however, there are no approved therapies for fatigue in MS.

Background

Relapsing remitting multiple sclerosis is an autoimmune neurological condition, frequently associated with reduction in energy, mental clarity, and quality of life that may affect a patient’s ability to work and live fulfilled lives. Approximately 80% of MS patients are affected by lack of energy; however, there are no approved therapies for fatigue in MS.

Methods

• Retrospective chart reviews were conducted for all patients treated with IVIG in addition to their standard DMT due to disease progression, worsening of activity and/or reduction of quality of life
• Patient reported outcomes were collected standard of care including: whether or not they have seen an improvement or worsening in: energy levels, cognition, relapse frequency, gait, and overall disease activity
• Analyzed data to determine effects of IVIG when used as an adjunctive therapy

Results

Since Starting IVIG, Energy Levels Have:
- Improved: 29.03%
- Worsened: 25.81%
- Stayed the Same: 70.97%

Since Starting IVIG, Overall Sense of Well-Being Has:
- Improved: 25.81%
- Worsened: 25.81%
- Stayed the Same: 74.19%

Since Starting IVIG, gait/walking has:
- Improved: 61.29%
- Worsened: 25.81%
- Stayed the Same: 12.90%

Since Starting IVIG, ability to think/mental clarity has:
- Improved: 58.06%
- Worsened: 35.48%
- Stayed the Same: 6.45%

Since Starting IVIG, MS Attacks/Exacerbations/Flares Have:
- Been More Frequent: 58.06%
- Less Frequent: 41.94%

Discussion

• There is a substantial increase in energy levels and overall sense of well-being, and significant improvement in gait, cognition and other key aspects of multiple sclerosis including quality of life with the addition of adjunctive IVIG to standard DMTs
• Patients received IVIG for a wide duration of time from one month to 10 years, suggesting onset of action is rapid and response is durable
• Patients were prescribed IVIG with DMTs including: Copaxone, Gilenya, Tysabri, Aubagio, Tecfidera, Rebif, Lemtrada and Rituxumab
• When asked how they felt regarding the overall impact of IVIG, patients reported:
  - “IVIG is like my charging station”
  - “I always feel better after my IVIG. I feel that I’m more awake, my brain works faster, and my energy levels take a big increase. The IVIG has really made my life better. I can’t imagine what it would be like without IVIG.”
  - “I feel like I have my life back”
  - “IVIG gives me mental clarity and energy which gives me the ability to work out and take better care of myself”
  - “IVIG has allowed me to work 13 hour shifts as an RN, as well as the energy I need on my days off to run errands and enjoy day to day life”
• Data supports adding IVIG to the standard MS treatment protocol in a complementary manner to reduce MS fatigue

Acknowledgements