Factors Contributing to Patient Preference for Home-Based Subcutaneous Immunoglobulin Therapy

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Aim

To determine factors contributing to patient preference for home-based subcutaneous immunoglobulin (SCIg) therapy.

Introduction

The cornerstone of therapy for primary immunodeficiency disease is Immunoglobulin Replacement Therapy (IgRT), which requires ongoing injections of IgG given in various intervals from weekly to monthly. The predominant route of IgG administration had historically been through intravenous (IV) infusion, but due to a variety of factors including cost and convenience, SC administration has become much more common.

Study Overview

Anecdotally, patients have expressed a preference for home-based subcutaneous immunoglobulin (SCIg) infusion therapy, often citing the flexible scheduling that home-based treatment provides. Overall time savings, especially in not having to commute to an infusion center, is also a preference frequently expressed. Cost can also be an important variable. Infusion time is another important variable that has received little scrutiny; however, it is a variable that affects patients and their caregivers. This examination of the data looks to explore how decisions are made between subcutaneous infusion and intravenous infusion therapy.

Methodology

This is a systematic review of current literature pertaining to reasons why patients opt for home-based subcutaneous infusions versus intravenous infusions, with a focus on factors influencing a switch from one modality to another.

Results

The summarized findings below suggest that multiple favorable factors exist for SCIg compared to IVIg. Past research performed highlight improvements in quality of life, treatment adherence, similar or better efficacy, safety, and overall positive outcomes with SCIg. Budget impact models indicate significant savings, especially when considering home-based SCIg administration. These findings emphasize the potential economic benefits and effectiveness of SCIg therapy.

Reasons	SCIG	IVIG
Administration	Self-administered at home using a small needle and infusion pump	Administered in a healthcare facility by a healthcare professional
Convenience	Allows for flexibility in scheduling and reduces the need for frequent hospital visits	Requires regular visits to a healthcare facility for infusions
Quality of Life	Improves quality of life for patients with primary immunodeficiency diseases	May have a negative impact on quality of life due to the need for frequent hospital visits
Infection Rates	May lead to lower infection rates compared to IVIG therapy	Infection rates may be higher due to the need for hospital visits
Treatment Satisfaction	Patients report higher treatment satisfaction with SCIG self-infusions at home	Treatment satisfaction may be lower due to the inconvenience of hospital visits
Safety and Tolerability	Generally well-tolerated with a favorable safety profile	Generally well-tolerated with a favorable safety profile
Product Options	Available in different formulations such as 20% solution	Available in different formulations such as 10% solution
Personalized Therapy	Allows for personalized therapy based on individual patient needs	Allows for personalized therapy based on individual patient needs

Patient Testimonials:

Reason	Patient Testimonials
Flexibility in scheduling	"I can do my treatment any time in a week, in the mornings, late at night – whatever suits me." [1]
Reduced incidence of systemic adverse events	"SCIg has a reduced incidence of systemic adverse events compared to IVIg." [1]
More stable serum immunoglobulin G (IgG) levels	"IVIg users reported a greater unfavorable impact of their treatment regimen on work/school attendance compared with SCIg users." [1]
Comparative ease of administration	"SCIg infusions are simple to set up and the needles used are so small that you barely feel them." [1]

Discussion

This systematic review delves into the patient perspectives of SCIg or IVIg modalities and investigates the various factors that contribute to patients' preferences for home-based subcutaneous immunoglobulin therapy. Understanding patient preferences is crucial in designing patient-centered treatment strategies, and the medical community must be committed to delivering solutions that prioritize patients' comfort, convenience, and overall well-being. Listening to direct patient testimonials must also play a crucial role in gathering valuable insights and firsthand experiences. These published testimonials offer personal accounts from patients who have chosen SCIG therapy over IVIG therapy. By sharing their experiences, patients provide real-life examples that highlight the benefits of SCIG therapy. These testimonials offer a deeper understanding of the patient perspective and can help healthcare professionals and individuals make more informed decisions about their treatment options.

Conclusion

Many hypotheses can be deduced from this review including flow rates impact patient satisfaction with and adherence to SCIG; there is an impact that infusion times make on patient's willingness to switch from IVIG to SCIG; shorter infusion times increase patient satisfaction with equivalent tolerability; and finally patient adherence to SCIG and IVIG are equivalent although physicians tend to believe the misconception that IVIG might have an advantage. More in-depth research is needed on each of these topics in order to make these statements in confidence.

References

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