

Experience of Intravenous Immunoglobulin Therapy in Dermatology Department of Mersin University

Ufuk Kavuzlu, Ümit Türsen*, Abdulselam Tanriverdi,
Tamer İrfan Kaya and Aysin Köktürk

Department of Dermatology, Mersin University, Mersin, Turkey

*Corresponding author

Umit Türsen, Department of Dermatology, School of Medicine, Mersin University, Mersin, Turkey, Tel: 90-324-3374300-1171; Fax: 90-324-3374305; E-mail: utursen@mersin.edu.tr

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Abstract

Intravenous immunoglobulin (IVIG) is a purified blood product preparation and it is derived from the plasma of large numbers of healthy donors. IVIG has been used in a number of diseases also it has been used in various dermatological diseases. By this time IVIG has been given to 33 patients with various dermatological diseases such as connective tissue diseases, blistering diseases and various inflammatory diseases in dermatology department of Mersin University. Two of patient's treatment was interrupted because of side effects. Sixteen patients were still being treated with IVIG in dermatology department of Mersin University. Almost in most of the patients a significant improvement was observed.

Keywords: Dermatology department, Dermatological diseases
Intravenous immunoglobulin.

Introduction

Intravenous immunoglobulin (IVIG) is a blood product prepared from the serum of between 1000 and 15000 domains per batch and it is used for patients with antibody deficiencies [1]. Also it has been used in the treatment of various dermatological diseases such as bullous diseases, toxic epidermal necrolysis (TEN) [2]. In this study we shared our experience of IVIG therapy in dermatology department of Mersin University.

Case Study

We reviewed cases involving all patients who treated with IVIG in dermatology department of Mersin University.

By this time IVIG has been given to 33 patients in dermatology department of Mersin University. 18 of them were female and 15 of them were male. IVIG treatment was given 6 patients because of bullous diseases. 5 of them were pemphigus vulgaris and one of them was lichen planus pemphigoides. Six of patients had connective tissue diseases. 3 of them were dermatomyositis and 3 of them were scleroderma. 12 patients were treated with IVIG because of allergic causes. 9 of them were chronic urticaria and 3 of them were atopic dermatitis. Two patients were immediately treated with IVIG because of TEN. Also IVIG was given other dermatological diseases such as lichen planus, vasculitis, Behcet disease. Treatment of two patients were interrupted because of side effects. There was seen rosacea on one of the patients. Venous thrombosis occurred in other patients.

Discussion

Mechanisms of action of IVIG are functional blockade of Fc receptors, auto-antibody neutralization, inhibition of auto-antibody production and complement inhibition [3]. IVIG treatment is recommended in a dose of 2gr/kg per cycle and each cycle divided 3 or 5 days. Infusion is given slowly over 4-5 hours [4]. In autoimmune bullous disease IVIG treatment is used because of side effects of corticosteroids or resistance to conventional therapy [4].

In a randomized-controlled study it was shown that IVIG treatment is effective with systemic corticosteroid [5]. Also we treated 5 pemphigus vulgaris patients with IVIG with low dose corticosteroid and especially 3 of them there was seen significant effect. Also IVIG treatment was effective in connective tissue diseases. In a RKS IVIG treatment with systemic corticosteroid was shown effective in patients with dermatomyositis [6]. Also we treated 6 patients with connective tissue diseases. Three of them were dermatomyositis and other patients were scleroderma. Also IVIG treatment was given in our clinic in other dermatologic diseases such as TEN, vasculitis or atopic dermatitis.

Conclusion

IVIG treatment has been used in a lot of dermatological diseases as off-label. In literature most of this diseases present as case reports so multicenter controlled studies are needed to determine efficacy of IVIG therapy in dermatological diseases.

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