Subcutaneous Immunoglobulin Replacement Therapy with Intravenous Preparation in Primary Immunodeficiency Patients

Abstract

Introduction: Recently, immunoglobulin (Ig) administration via subcutaneous route has become popular. However, now there has not been subcutaneous preparation available in Turkey. Here, our aim is to reveal our clinical experience with 3 PID patients in whom we used IVIG preparation (Kiovig®) for subcutaneous route.

The patient and methods: Four patients with PID were selected for SCIG. The patient have been treated with IVIG (0.4- 0.6gr/kg/dose) every 3-4 weeks. 3-4 week total dosage calculated, then divided into 3-4 doses and given. They have been followed up for the last 4-5 months since then.

Case 1: 19-year-old male was diagnosed with CVID with complaints of recurrent lower respiratory tract infections 4 years ago. He was treated with IVIG every 3-4 weeks according to his Ig levels and clinical evaluations. He weighs at 78 kilograms and was taking 35g IVIG every 3-4 weeks. For the last 5 months, he has been treated with 10g IVIG per week subcutaneously.

Case 2: 10-year-old female was diagnosed with CVID and was treated with IVIG every 3-4 weeks according to her Ig levels and clinical evaluations. She weighs at 20 kilograms and was taking 10g IVIG every 2-3 weeks. For the last 4 months she has been treated with 5g SCIG per week. At the beginning, she experienced urticarial rash a couple of time over the skin SCIG given.

Case 3: 7-year-old male was diagnosed with hyper immunoglobulin M syndrome 5 years ago with complaints of recurrent fever until 6 month-year-old. He weighs at 19.5 kilograms and was taking 10g IVIG every 2-3 weeks. For 2 months he has been treated with 5g SCIG per week. In fourth dose, mild local reactions including swelling, redness, and burning sensation were reported at the infusion site that disappeared within 4-6 hours.

Case 4: 13-year-old male was diagnosed with CVID and was treated with 20g IVIG every 2 weeks according to his Ig levels and clinical evaluations. For the last 2 months he has been treated with 10g SCIG per week.

Conclusion: Our 4 patients tolerated subcutaneous use of intravenous preparation very well. We observed mild local skin reactions but there weren’t any systemic complications. All of our patients’ clinical symptoms, spirometric evaluations and serum Ig levels got better after SCIG.