



Treatment Response to Unique Blend IVIG with High Titers to RSV and Common Respiratory Pathogens in Patients with Antibody Deficiency and Chronic Lung Disease

Lauren Loop ^{1,2}, Anoushka Tambay ^{1,2}, Bob Geng MD ^{1,2}
Division of Allergy and Immunology, Department of Pediatrics, University of California, San Diego¹, Allergy and Asthma Medical Group²

Background

Patients with antibody deficiency often face recurrent respiratory infections despite being on conventional immunoglobulin therapy (IgRT) and antimicrobials prophylaxis. Recurrent infections worsen existing chronic lung disease (CLD), resulting in bronchiectasis highlighting the need for pulmonary-directed IgRT. IVIG human-slra 10% is a specialized product that combines conventional human plasma immunoglobulin with plasma from donors with high titers to RSV and other common respiratory pathogens.

Methods

Efficacy of this unique IVIG for treating CLD was explored in two patients: a 67-year-old female with common variable immunodeficiency (CVID) and a 35-year-old male with Bruton's agammaglobulinemia. The following were collected:

- Spirometry
- Clinical QoL evaluations
- Infection frequency
- Healthcare utilization

Results

Patient

Pre: 3 infections yearly
Post: 0 infections in six
months

Pre: albuterol 2-8
times per week
Post: three times
weekly (except
illness)

Pre: 20 infections yearly
Post: 0 infections in six
months

Pre: albuterol 2-8
times per week
Post: maximum three
times weekly (except
illness)

Spirometry results showed modest improvement in the CVID patient, with predicted FEV1 of 116% post-treatment, and a corresponding rise in energy reported. In the Bruton's patient, chest and nasal congestion resolved completely. Both patients reported increased tolerability compared to conventional IVIG therapies, with no headaches, post-infusion fatigue or wear-off effects experienced and neither required antimicrobials in the six months after starting new IG therapy.

Conclusion

The cases presented above suggest that pulmonary-directed IgRT with elevated titers against common respiratory pathogens has clinical significance in decreasing CLD symptoms and increasing overall tolerability and quality of life in antibody deficiency patients with CLD.