Secondary Immunodeficiency: A Difficult Diagnosis In Clinical Practice
Division of Allergy and Clinical Immunology, Department of Pediatrics, Federal University of São Paulo, São Paulo, Brazil

RATIONALE
• Secondary immunodeficiencies (SID) may be caused by hypercatabolism, protein loss, infections and medications.
• The objective of this study was to describe the profile of the patients diagnosed with SID to immunosuppressants followed in an immunology service.

METHODS
• This is a retrospective longitudinal study based on analysis of 9 medical records.
• Levels of IgA, IgM, IgG and CD19 were analyzed before and after immunosuppression. We also investigated the underlying disease, the drugs used and the treatment instituted for SID.

CONCLUSIONS
• Immunosuppressive drugs have important and lasting effects on antibody production and immune system interaction.
• Immunological evaluation before treatment is essential to correctly diagnose SID and exclude primary immunodeficiency.

EXTRA
• The mean current age of patients was 48 (±14) years old.
• 78% (n=7) of the patients were female and 22% (n=2) were male.

RESULTS
Only 22% of the patients had an immunological investigation before immunosuppressive treatment, making the diagnosis of SID questionable.

- Underlying disease:
  - Systemic lupus erythematosus: 45%
  - Granulomatosis with polyangiitis: 11%
  - Cryoglobulinemic vasculitis: 11%
  - Non-Hodgkin's lymphoma: 22%

- Drugs:
  - Hydroxychloroquine: 22%
  - Methotrexate: 22%
  - Azathioprine: 33%
  - Mycophenolate: 45%
  - Cyclophosphamide: 78%
  - Rituximab: 78%

- At the diagnosis of SID, all patients had IgG levels below the 3rd percentile (mean value of 266 mg/dL). Only 3 patients (33%) had CD19 dosage (all of them <3%). 11% had normal IgA dosage, 11% had a normal IgM dosage and 11% had IgM levels above 97th percentile.
- 56% had received more than one immunosuppressant prior to SID.
- Immunoglobulin replacement was indicated for all of them.

Author correspondence: isabellaburla@hotmail.com