



18° CONGRESSO NAZIONALE
Società Italiana di Allergologia e Immunologia Pediatrica (SIAIP)

CONIUGARE RICERCA E PRATICA CLINICA IN IMMUNO-ALLERGOLOGIA

PALERMO
3-5 GIUGNO 2016 - Dipartimento di Ingegneria Viale delle Scienze



TITOLO: Immunological analysis of six patients with Down Syndrome: a new form of combined immunodeficiency?

PRIMO AUTORE: Vassilios , Lougaris

AUTORI: Vassilios , Lougaris

TELEFONO: 0303996284

FAX:

Email: vlougarisbs@yahoo.com

DIPARTIMENTO/OSPEDALE: Pediatrics Clinic and Institute for Molecular Medicine A. Nocivelli, Department of Clinical and Experimental Sciences, University of Brescia, Spedali Civili di Brescia, Italy

TESTO:

Introduction: Down Syndrome (DS) is the most common chromosomal abnormality among live-born infants (1:750). Affected patients may suffer from recurrent respiratory infections, autoimmune manifestations and hematological malignancies. These clinical findings are suggestive of a disturbed immunological balance. While B cell maturational defects were recently reported in DS, detailed T cell functional and maturational studies in DS are scarce, especially in adolescents/young adults. Objective: To study six DS patients with severe clinical or immunological phenotype (2 patients with invasive infections, 2 with severe cutaneous infections and 2 with CD4+ lymphopenia) Methods: Peripheral immunophenotyping for B and T cells; mitogen-induced T cell proliferation. Results: CD4+ lymphocytes total count was decreased in all patients with severely impaired CD4+ naïve and RTE cells, resembling combined immunodeficiency (CID). The lymphocyte response to phytohaemoagglutinin was completely impaired/abolished in all patients, while responses to anti-CD3/anti-CD3+IL2 were normal. Regarding the peripheral B cell compartment, a decreased number of switched memory was observed in 3/6 patients and increased CD19hiCD21low in 2/6 patients. All patients are currently under cotrimoxazole prophylaxis. Conclusions: Considering the frequency of DS syndrome, clinicians should consider performing immunological investigation in their patients in case of severe and/or unusual infections. Further studies in larger cohorts are warranted in order to better define the immunological alterations in DS.

Abstract per il Congresso

18° CONGRESSO NAZIONALE Società Italiana di Allergologia e Immunologia Pediatrica

che si terrà dal 3 al 5 Giugno 2016 a Palermo,
presso Polo Didattico Dipartimento di Ingegneria, Viale delle Scienze