Abstract

Health Science Journal
ISSN 1791-809X

2021
Vol.15 No.P33

The Immune-Endocrine Interactions: a Case Report

Di Capua L[1], Cannavacciuolo F[2], Apuzzi V[3], Nunziata M[4] and Allegorico E[5]

[1]UOC Medicina Interna, OO.RR Area Stabiese Ospedale San Leonardo Castellammare di Stabia, ASL Napoli 3Sud, Italy
[2]UOC Medicina Interna, AORN San Giuseppe Moscati, Avellino, Italy
[3]UOC Medicina Interna e Lungodegenza, San Giovanni Bosco, Napoli, Italy
[4]UOC Medicina Interna Carlo Poma, ASST Mantova, Italy
[5]UOC Medicina e Chirurgia di Accettazione e di Urgenza, Ospedale "Santa Maria delle Grazie", Pozzuoli, Napoli, Italy

Background: Authors emphasize the role of hormones for T and B cell to generate humoral or cell mediated immune responses.

Case history: A 39-year-old white man presented to Department for not pruritic, Darier's sign positive, red-brown macules gradually appeared and distributed over trunk, upper arms and neck. Medical history included a GH-deficiency treated from 12 to 16 year old. No history of infections, familiar immunodeficiency or thyroid disease. Examination of the body was normal. Hormones dosage showed hypothyroidism while thyroid antibodies were negative. Data confirmed low levels of GH showing also testosterone deficiency. Antipituitary antibodies were negative. We revealed humoral immunodeficiency (low Immunogloblins) with normal values of T and B cell subpopulations. Brain MRI evidenced Chiari type I malformation and reduced volume of the anterior pituitary gland. Bone density scan evidenced a severe osteoporosis. Histology of skin biopsy confirmed mast cell accumulation in a perivascular distribution within derma.

Discussion: We first describe the association of hypopituitarism, immunodeficiency and mastocytosis. This association supports in vivo the functional link between the endocrine and immune systems as shown in studies where the development and function of the immune system are strightly related to hormonal levels. In this patient hormonal deficiency may have been the cause of immunodeficiency. We stress the importance of immunological screening in patients with hormonal deficiency. In some cases, replacement hormonal therapy can correct immunodeficiency.