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Abstract

# Interactions between Immune Activation and Regulatory T Cells in Mycobacterium tuberculosis Infected Lymph Node

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## Abstract:

At sites of infection, cellular immune responses play a pivotal role in control of Mtb infection with CD4+ T cells having the central role. Following infection, CD4+ T cells undergo activation to control infection by producing Th1 and Th17 cytokines. Polyfunctional T cells, have been associated with protection against Mtb disease. On the other side, immune responses are modulated by T regulatory cells (Tregs). The relationship between Tregs and immune activation at sites of Mtb disease is still not clear . We showed that the proportion of activated CD4+ and Tregs in Lymph node mononuclear cells (LNMC) was increased compared to peripheral blood mononuclear cells (PBMC). The correlation between Tregs and activated CD4+ T cells was stronger in LNMC than PBMC.

## Biography:

Dr. Fouad Seghrouchni joined the National Institute of Hygiene since 1993 where he worked as biologist engineer. He has completed later his PhD in immunology from the university of Mohammed V of Rabat. In 2002, he joined Tor Vergata University of Rome to work in the in-silico prediction and conception of new sub-unit antigens of Mycobacterium tuberculosis. He participated in this framework in patenting an invention. Since 2006, Dr. Seghrouchni is the director of the Laboratory of Cellular Immunology in the National Institute of Hygiene. He has published more than 17 papers in reputed

journals and he is the deputy editor Noth Africa of the journal of public health of Africa. He is the president of the Moroccan Association of Cytometry.

## Recent Publications:

1. Moroccan lymphocyte subsets reference ranges: age, gender, ethnicity, and socio-economic factors dependent differences
2. Cell-mediated immune response associated with Chlamydia pneumoniae infection in atherosclerotic patients
3. Immune activation and regulatory T cells in Mycobacterium tuberculosis infected lymph nodes
4. Abcès pariétal sous-sternal révélant un déficit d'expression des molécules HLA classe II chez un nourrisson marocain de 7 mois



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