

Overactive bladder as a dysfunction of the autonomic nervous system

Gargi Maitra

Consultant Pulmonologist, North Bengal University, India

Abstract

Immune cells function and fate are dictated by immunometabolism, meanwhile the nervous system regulates immunity. There is currently no literature on neuroregulation of immunometabolism. The key question of how immune homeostasis and immunometabolism is regulated is unanswered. We critically reviewed the latest literature and hypothesized that neurotransmitters in the autonomic nervous system and stress hormones, including norepinephrine (NE), acetylcholine (Ach) and glucocorticoids (GCs), regulate glycolysis, the tricarboxylic acid (TCA) cycle and gluconeogenesis to control immunity. We also summarize reported empirical data which support the role of: (i) glucose immunometabolism in immune-cell function; (ii) NE, Ach and GCs in glucose metabolism and immunity regulation. This hypothesis is important not only for monitoring immunity by means of cytokines, immunometabolism, neurotransmitters and stress hormones, but also for revealing the cause of metabolism and immune-related diseases.

Received: May 06, 2022; **Accepted:** May 10, 2022; **Published:** May 20, 2022

Biography

Dr. Gargi Maitra, completed her MBBS from North Bengal University, stood 1st class 1st in her MBBS. She completed her MD in Pulmonary Medicine followed by Indian Diploma in Critical Care Medicine. She has worked as an Associate

Editor for 'Bronchoscopy in ICU, A Practical guide' book. She has keen interest in critical care and interventional bronchoscopic procedures and has been actively involved in conducting and participating in various conferences at national level on Pulmonology and Bronchoscopy. She has presented cases in Lung India journal.