Marco Antonio Peliky Fontes, Endocrinol Metab Syndr 2015, 4:4
http://dx.doi.org/10.4172/2161-1017.C1.008

OMICS International
conferenceseries.com

3rd International Conference on
Endocrinology
November 02-04, 2015 Atlanta, USA

The descending sympathetic pathways from dorsomedial hypothalamus: Critical links to understand stress-related and obesity-related cardiovascular diseases

Marco Antonio Peliky Fontes
Universidade Federal de Minas Gerais, Brazil

Maintenance of homeostasis depends upon mechanisms controlling autonomic output. Sympathetic output depends on neuronal activity from different brain regions. Central requirement for changes in sympathetic output must be adjusted to the input signals from neural and humoral factors for an optimum cardiovascular performance. Consequently, abnormal inputs to one or more brain regions involved in the sympathetic control can lead to cardiovascular disease. Contributing factors may involve; abnormal feedforward and feedback mechanisms and altered humoral factors including angiotensinergic and leptinergic inputs. The dorsomedial hypothalamus is a key central region for the control of sympathetic outflow to the cardiovascular system. Recently, the descending sympathetic pathways from dorsomedial hypothalamus have been revealed. Reviewing the descending pathways from dorsomedial hypothalamus we discuss the interactions between mechanisms controlling the sympathetic output to the cardiovascular system and the possible implications in cardiovascular disease.

Biography

Marco Antonio Peliky Fontes has completed his PhD from Federal University of Minas, Brazil and Post-doctoral studies from University of Sydney, Australia. He is an Associate Professor in the Department of Physiology and Biophysics at the UFMG. He has published more than 50 papers in reputed *Physiology and Neuroscience journals*. He is elected as a Member of the American Physiological Society and INCT Nanobiofar/Brazil. The central area of his research is cardiovascular neuroscience with focus in circuits involved in the cardiovascular response to emotional stress and the central contribution of peptides for cardiovascular control.

peliky@icb.ufmg.br

Notes: