Conference Abstract

DAY 1 15th September 2023 (Friday)	ORAL 2	3.30-5.00 pm	Scientific Session 9

Changes in the seahorse of brain due to chronic stress - A critical review

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Introduction: 75% of general population experience atleast some stress once inevery two weeks. Studies have shown that the chronic stress is a risk factor formany of physchological disorders including the cardiac, gastrointestinal disordersand obesity. Many of behavioral studies onhumans and animals have shown thathippocampus is most commonly involved at variable levels under the influence ofuncontrollable stress. This review provides a brief information on how the chronicstress influences the structural and functional damage on hippocampus.

Objective: The review focuses on the changes occurring in the hippocampus postexposure to chronic stress.

Methods/ Study description: The review of majority of study articles have shownthat the stress elevates the Cortisol and alters the hippocampal volume whicheventually impairs many of the memory tasks which are dependent onhippocampus.

Results: Chronic Stress clearly exacerbates the cognition pathway by inducingwidespread alterations to brain functioning, ranging from large scale network activityand reorganization to altered expression and function of synaptic proteins, incudingAβ protein and Tau-p Protein leading to deleterious effects on Hippocampus in manyneurodegenerative diseases likeAlzheimer's disease.

Conclusion: Chronic stress acts as a putative link between neuropsychiatric andneurodegenerative disease. Hence good and healthy lifestyle changes should beendorsed to reduce stress as a precautionary measure in humans

Key words: Chronic stress, Hippocampus, Cortisol effects, Neurodegenerativedisorders, Sea horse of brain.