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Dimple Shet

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Effects of cod liver oil on brain antioxidant level and neuronal count in Wistar rat model of comorbid depression

Dimple shet, Nayanatara Arun Kumar, Rekha D Kini, Aradana Marathe, Megha Gokul , Vandana Blossom

Nutritional psychiatry has been suggested role in influencing mind health and body. Diet and proper nutrition are not only essential for human physiology but also has its influence on mental wellbeing. Exposure to chronic external stress factors leads to the generation of inflammatory pathways leading to neuropsychiatric disorders. The chronic unpredictable stress model has been considered as the effective model to study anxiety and depression in animal model. The aim of the present study was to explore the beneficial effects of cod liver oil on hippocampus in chronic unpredictable stress induced wistar rats on biochemical and neurological parameters. Cod liver oil proved to be the effective antidepressant agent. Moreover the observed beneficiary effect was similar to antidepressant imipramine. The protective role of cod liver oil on hippocampus in depressed rats could provide a more insight into various therapeutic modalities in various neuropsychological disorders.

Key words: Cod liver oil, Chronic unpredictable stress, antidepressant, depression, Hippocampus, anxiety