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Phytochemical characterization and neuroprotective assessment of standardized extract of Pedalium murex Linn leaves in endotoxemia-induced neurodegenerative model in rats

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An attempt has been made to understand the protective role of ethanol extract of *Pedalium murex* Linn herbs (EEPM) by employing LPS to induce neurodegeneration. Animals were divided into six groups. The animals were exposed to LPS (xx mg/kg; I.P.) once (on day 1) and the changes in food and water intake, body weight and general behavior were observed for 30 days and the effect of EEPM on the perturbations in antioxidant defense elements in hippocampal region of rat brain were also studied. Further, histopathological (hippocampal CA1) tests were carried out to substantiate the study. In addition, isolation, characterization and standardization of the chosen molecule were also carried out and the molecule was further subjected to *in vitro* antioxidant studies. Neurodegenerative diseases are one of the most debilitating with respect to medical, financial and associated social issues. Currently, effective drugs for treating neurodegenerative diseases have led to discovery of new molecules from nature. Recent advances in the basic knowledge of such diseases have led to a re-evaluation involving new therapeutic approaches. Like other herbs, the neuroprotective effect of *Pedalium murex* in endotoxemia-induced neurodegenerative model is debatable and its neuropharmacological profile has not been investigated so far. This study may shed light on the potential role of *Pedalium murex* in such diseases and its development/discovery may herald a new therapeutic agent from nature.

## **Biography**

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