Introduction: Salvia lachnostachys Benth., Lamiaceae, is the endemic specie from Southern Brazil. Studies with Salvianolic acid B, a constituent of Salvia miltiorrhiza Bge was effective against mechanical hyperalgesia, but there are no studies of neuropathic pain in any species. Peripheral nerve injury can result in many changes, including associated cognitive and emotional comorbidities like depression, motor dysfunction, plus mechanical, cold and thermic hypernociception. The potential inhibitory action of oral treatment of extract of S. lachnostachys on mechanical hypernociception and behavioral alterations induced in rats by Spared Nerve Injury (SNI) are analyzed in this work. Objectives: The present work has investigated the anti-allodynic and antidepressant activities of the S. lachnostachys in rats. Methods: Extract or control vehicle was administered orally to the animals, after the sciatic nerve injury (SNI). The groups were: the control group treated with vehicle; the Salvia group that received extract of S. lachnostachys (100 mg/kg) and the SNI group that received vehicle. Mechanical sensitivity as well as forced swim were analyzed at the 10th and 15th days after SNI procedures in all animals. Results: Oral administration for up to 15 days of the ethanolic extract of S. lachnostachys (100 mg/kg) significantly inhibited SNI-induced mechanical allodynia and increased immobility in the forced swim test on the 10th and 15th days. Conclusion: All the results of the present work show that the ethanolic extract of S. lachnostachys (100 mg/kg) demonstrated anti-allodynic and anti-depressive effects in SNI rats. The present results may have clinical relevance and may open new possibilities for the development of new anti-allodynic and/or antidepressive drugs.