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The effect of *Salvia leriifolia* root extracts on lipid peroxidation level during global cerebral ischemia-reperfusion injury in rat hippocampus

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The previous pathological data has revealed that *Salvia leriifolia* root extracts have a neuroprotective activity against cerebral ischemia, thus the effect of the root extracts on lipid peroxidation was evaluated using experimental global ischemic-reperfusion in the hippocampus of rats. Cerebral ischemia was induced by four-vessel-occlusion (4VO) for 20 min. The aqueous and ethanolic extracts (0.1, 0.2 and 0.4 g/kg), phenytoin, as positive control, (50 mg/kg) and normal saline (10 ml/kg) were administered intraperitoneally 15 min after the induction of ischemia. The malondialdehyde (MDA) was measured by the thiobarbituric acid (TBA) test. The MDA level was higher in the saline group than the sham group. The MDA levels were recovered significantly upon phenytoin and the extracts therapy in the hippocampus of ischemic rats. These results suggest that *S. leriifolia* root extracts may show a protective effect against lipid peroxidation in cerebral ischemia.

Keywords: *Salvia leriifolia* root, free radical, four-vessel-occlusion, lipid peroxidation, malondialdehyde

The effect of rbst (Boostin-s) on some blood metabolic factors and some metabolic disorders in dairy cow

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The use of recombinant bovine somatotropin (rbst) in dairy cattle industry is a common practice in many countries. Objectives of this study were to evaluate the effects of rbst on blood metabolic parameters (glucose, nonesterified fatty acids (NEFA), hydroxy-butyrate (BHB), albumin, BUN, Ca, P, $C_{a/p}$) in primiparous and multiparous Holstein dairy cows. Twenty cows were treated S.C with 500 mg of rbst at 14-d intervals from 6 till 18 weeks postpartum. Results showed that treatment with rbst did not affect blood parameters and the only significant effect ($p \leq 0.05$) was reduction in body condition score at the end of the treatment period. In conclusion, rbst administration did not alter the incidence of metabolic disorders (clinical and sub-clinical). It appeared that rbst treatment does not affect the energy balance status in dairy cows as used in this study.

Key words: rbst, dairy cows, metabolic disorder