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The effect of aquae extract of Aloe-vera on Pexpression Bcl2 after spinal cord compression in adult rats

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To study the effects of aquae extract of Aloe-vera on motoneuron survival, Bcl2 expression was evaluated. 24 sprague Dawley rats from Razi Institute were prepared. They were divided to 4 groups: 1-laminectomy ((T9-T11 vertebra)+injection extract of Aloe-vera. 2- laminectomy +injection extract of Aloe-vera+compression. 3- laminectomy+injection saline normal. 4-laminectomy+injection saline normal+compression. Intrapituneal injection continued for 4 weeks. After 4 weeks they were sacrificed. Spinal cord motoneurons were counted and we studied their morphometry. Expression Bcl2 was analyzed by immunohistochemistry. The results showed compression causes, motoneurons reduction with hematoma among the cells and cavitation. Aloe-vera extract decreased motoneurons death, Bcl2 expression increased ($P \leq 0.05$).

Key words: Mechanical Spinal Cord injury, Aquae extract of Aloe-vera, Bcl2

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The effects of deprenyl on expression of Trk-C receptor in new born rats after sciatic nerve axotomy.

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Deprenyl is a drug with mono amino oxidase inhibitor effects and is used for the treatment of parkinson's disease. Several studies have demonstrated it's neuroprotective effect on motoneurons. In this investigation, the molecular study's on the anti-apoptotic effect of deprenyl is evaluated. The left sciatic nerves of sprague-Dawley newborn, 3 days rats, were axotomized in the middle of thigh. The newborn rats divided to two groups, one group was treated with intra peritoneal injection of deprenyl and the other group with normal saline. Each group was divided to 2 sub groups as, the first was treated with Deprenyl or normal saline one hour before surgical transection, the second were treated at surgery, respectively.

Molecular studies for the expression Trk-C was done on two groups of animals which one were sacrificed 4 and 8 hours after

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