Key Word: Deprenyl - Apoptosis - Motoneuron-Trk-C receptor

## The study of neuroprotective effect of Aloe vera in spinal cord injury.

## Marjan Heshmati - Alireza Azizzade Delshadi

Introduction & Aim: The most considerable mechanism of spinal cord injuries is fracture of vertebra. One of the methods of studying this field is establishment of spinal cord injuries in laboratory animals.

In this study we try to make spinal cord injury in Sprague - Dawley adult male rats and then study the neuroprotective effect of Aoe vera by light microscope.

Material and Methods: To achieve this aim we used aneurysm clips. After the laminectomy of T9 to T11 vertebrae which is superior to lumbar plexus.we used aneurysm clip to compress the spinal cord. Then classification of rats: group Alaminectomy.group B - laminectomy and aneurysm clips.group C -Aleo vera injection.group D Aloe vera injection+ aneurysm clips. Sampling was done in 1,2 and 4 weeks after laminectomy.

Result: The morphometry study in goup B indicates motoneuron decreased with hemorrhage within the holes in grey matter. In group D these changes are less (p 0.05).

Conclusion: Spinal cord compression induces motoneuron apoptosis and it rises by the time. Aloe vera decreased this process.

Key words: Aloe vera-Apoptosis-Clips aneurysm.

Tehran - Razi Conference Hall February, 13-15,2013

Medical Sciences of Shahed University