STUDY OF DEPRENYL EFFECTS ON GLIOSIS AFTER SPINAL CORD COMPRESSION IN ADULT RATS

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Aim: The effect of deprenyl on motoneuron survival and gliosis after spinal cord compression.

Material and methods: We used Sprague dawley rats from Razi institute to determine motoneuron survival and gliosis by morphometry and immunohistochemistry methods because of deprenyl effect.

Result: The results are divided to two parts: 1-The result of morphometry for motoneuron survival 2-The result of astrocyte and oligodendrocyte count and their percentage. It shows after spinal cord compression, motoneuron in ventral horn decreased with cavitation and one of the groups which has taken deprenyl for 4 weeks this changes are less seen.

After 4 weeks neuroprotective effects of deprenyl increased (p ≤ 0.05). Deprenyl has the same effect for gliosis reaction to decrease it and it is increased after 4 weeks (p ≤ 0.05).

Conclusion: For the first time deprenyl has studied for gliosis reaction. It seems the number and percentage of astrocyte decreased and we noticed the effect is much more after 4 weeks.