XVII SIMPOSIO DEL DEPARTAMENTO DE CIENCIAS DE LA SALUD

LA UNIVERSIDAD AUTÓNOMA METROPOLITANA
Y
EL DEPARTAMENTO DE CIENCIAS DE LA SALUD

División de Ciencias Biológicas y de la Salud
Iztapalapa
Casa abierta al tiempo

Otorgan la Presente:

CONSTANCIA

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Por su participación con el trabajo:

EVALUACIÓN DEL EFECTO NEUROPROTECTOR DEL PÉPTIDO A91 SOBRE LA APOPTOSIS, EN RATAS CON LESIÓN TRAUMÁTICA DE MÉDULA ESPINAL.

en el XVII Simposio del Departamento de Ciencias de la Salud.

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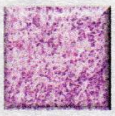


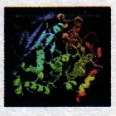
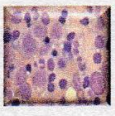


Abstract

Immunisation with neural-derived peptides is a promising strategy in models of spinal cord (SC) injury. Recent studies have also demonstrated that the addition of glutathione monoethyl ester (GHSE) to this strategy further improves motor recovery, tissue protection and neuronal survival after SC injury. As it is realistic to envision that this combination therapy could be tested in clinical trials, the therapeutic window should be experimentally explored before implementing its use in SC-injured human beings. For this purpose, 50 rats (10 per group) were subjected to a moderate SC contusion. The combined therapy was initiated at 10 min., 24, 72 or 120 hr after injury. Motor recovery and the survival of rubrospinal (RS) and ventral horn (VH) neurones were evaluated 60 days after injury. Results showed a significant motor improvement even if the combined therapy was initiated up to 72 hr after injury. BBB scores were as follows: 10 min.: 10.5 ± 0.7, 24 hr: 10.7 ± 0.5, 72 hr: 11.0 ± 1.3 and PBS: 6.7 ± 1 (mean ± S.D.). Initiation of combined therapy 120 hr after injury had no beneficial effect on motor recovery. Survival of RS and VH neurones was significantly higher in animals treated during the first 72 hr than those treated only with PBS. In this case again, animals treated with combined therapy 120 hr after injury did not present significant survival of neurones. Treatment with this combined strategy has a clinically feasible therapeutic window. This therapy provides enough time to transport and diagnose the patient and allows the concomitant use of other neuroprotective therapies.