Abstract:

This research was aimed to investigate the protective effect of capsaicin on the scopolamine-induced memory in male Wistar rats. In this design, 40 male adult Wistar rats are divided into 4 groups:

Negative control group: Receiving Scopolamine (0.5 mg/kg bw) without treatment

Treatment group: Scopolamine + Donpezil

Recipient Scopolamine and Scopolamine treated with Capsacin 0.2 mg/kg bw for 4 days

Group 3: Donpezil (2/5 mg/kg bw)

Group 4: Normal saline

The group scopolamine received only the Normal saline without treatment.

During this period, changes in body weight, blood glucose, food intake and amount of water consumed are recorded regularly during the trial period. After a period of time, we evaluate the effect of capsaicin on memory mice with the following test: Morris water maze (MVM). At the end of the experiment, the rats were sacrificed and the level of malondialdehyde of the brain tissue is measured as lipid peroxidation index. The behavioral studies of the study showed that IP injection of capsaicin (0.2 mg/kg bw) significantly reduced the time and distance parameters for finding the hidden platform compared to the control group.

MDA evaluation as lipid peroxidation index in brain tissue showed the significant reduction of donpezil and capsacin+scopolamine groups in comparison to scopolamine group.

Keywords: Capsacin, Scopolamine, Morris water maze, Memory, Rat
Title
Protective effects of capsaicin on memory impairment induced by -induced spatial memory impairment in rats

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