EVALUATION OF ANTIDEPRESSANT EFFECT OF VARIOUS STATINS IN COMPARISON WITH FLUOXETINE IN SWISS MALE ALBINO MICE

Abstract:

Aim: To evaluate the antidepressant effect of various statins in Swiss male albino mice by tail suspension method. Methodology: 30 adult male albino mice of weight 25-30 grams were taken and divided in to 5 groups, each containing 6 animals. Group I - control received normal feed and distilled water. Group II – Standard received Capsule. Fluoxetine 20 mg/ kg. Group III, Group IV, Group V received Rosuvastatin, Atrovastatin, Simvastatin 10 mg / kg respectively once daily for 14 days. Tail suspension test was done on day 7 and day 14 one hour after drug administration and immobility period was recorded. Result: On day 7 and day 14, in the tail suspension test there was a significant decrease in the duration of immobility in the standard group when compared with the control group. P value was < 0.01 level. The changes in the immobility period among the three test groups were also significant at 0.01 levels when compared with the control. There was no significant difference among the three test groups i.e. between rosuvastatin, atrovastatin, simvastatin. There is also no statistical difference between the standard and the test groups. On comparing day 7 and 14 there was no significant difference in the immobility period between the corresponding groups. Conclusion: Statins exhibited antidepressant effect in tail suspension test which was statistically significant and was comparable with that of fluoxetine.

Key words: Antidepressants, Statin, Fluoxetine, Tail Suspension Test.