

P-1070 - BEHAVIORAL ASSESSMENT OF ACUTE AND SUBACUTE ZINC TREATMENT WITH PAROXETINE IN THE FORCED SWIM TEST IN MICE

H.S.Al Amri

Department of Psychiatry, College of Medicine, Abha, Saudi Arabia

Although research into the pharmacologic treatments of MDD has expanded significantly in the past several years, Less than half of older adults achieve remission with antidepressant medications. Addition of another medication to the antidepressant regimen of patients with MDD not responding adequately to their treatment has become a common intervention. We hypothesized that addition of zinc with its multiple pharmacological effects to the antidepressants may modulate and enhance their efficacy. The present study investigated the behavioral changes of acute and sub-acute interaction of zinc with Paroxetine in the forced swimming test (FST) in mice. Mice were injected with either Paroxetine (20 mg/kg); zinc sulfate (40 mg/kg) or Paroxetine in combination with zinc for one day and one week (once daily). Results showed a significant antidepressant activity of Paroxetine or zinc alone as has been shown in a decrease of immobility and increase of swimming behavior. Also, results showed a significant decrease in the immobility time and increase in the swimming behavior time of the animals treated with zinc in combination with Paroxetine as compared with animals treated with either Paroxetine or zinc alone. There was no significant difference in the animals' behavior between acute and sub-acute treatment with Zinc or even upon its addition to paroxetine. Moreover, none of the treatment regimens have shown any significant changes in the animals' motor activities. This combination may have a significant clinical application in psychiatric patients particularly in geriatric patients or other population where zinc level has shown dramatic decrease.