

Anti-stress Potential of PHYTOCEE®: Effect on Immobility Test and Serum Cortisol Level

OBJECTIVE

To evaluate the anti-stress effects of PHYTOCEE®.

MATERIALS AND METHODS

Wistar rats of either sex (n=30), aged 8-10 weeks were grouped into five containing six animals in each: G1 - Normal control (0.5 % CMC), G2 - Stress control (0.5 % CMC), G3 - PHYTOCEE® 5 mg/kg, G4 - PHYTOCEE® 10 mg/kg, G5 - PHYTOCEE® 15 mg/kg. All groups except G1 were subjected to chronic variable stress (CVS) regimen for 16 days. Concurrently, animals were administered orally the respective treatment daily for 16 days. During the period of 16 days, for every four days (day 4, 8, 12 and 16), animals of all groups were subjected to forced swim test (FST) and the immobility time during the test was recorded. On day 16, immediately after FST, blood was collected and serum was separated. The serum cortisol level was estimated.

RESULTS

Effect of PHYTOCEE® on serum cortisol levels in rats subjected to CVS

Groups	Serum cortisol (ng/mL)
G1-Normal control	3.38 ± 0.63
G2-Stress control	4.74 ± 0.75*
G3-PHYTOCEE® (5 mg/kg)	4.80 ± 0.93
G4-PHYTOCEE® (10 mg/kg)	4.05 ± 0.99
G5-PHYTOCEE® (15 mg/kg)	3.67 ± 0.72#

Values expressed as mean ± SD; n=5
*p<0.05, Stress control Vs Normal control;
#p<0.05, Treated groups Vs Stress control

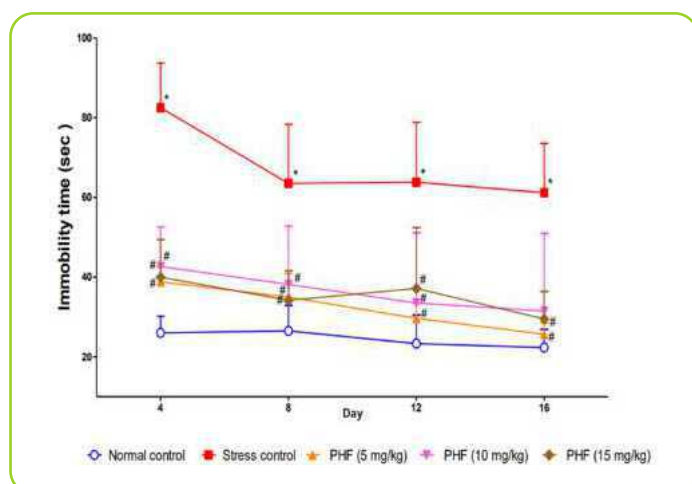


Figure: Effect of PHYTOCEE® on immobility time during FST in CVS

Values expressed as mean ± SD; n=6; *p<0.05, Stress control Vs Normal control;
#p<0.05, Treated groups Vs Stress control; PHF, PHYTOCEE®

CONCLUSIONS

PHYTOCEE® administration significantly decreased immobility duration and serum cortisol levels. Hence, PHYTOCEE® was proven to possess anti-stress properties.