

Antioxidant Potential of PHYTOCEE®: Effects on MDA, ALT, and AST

OBJECTIVE

To evaluate the antioxidant potential of PHYTOCEE® in carbon tetrachloride induced oxidative stress rat model study.

MATERIALS AND METHODS

Male rats (n=36) were randomly allotted to six groups each consisting of six animals. G1 was administered with vehicle control (demineralized water 10 ml/kg), G2 served as a negative control (CCl₄ with olive oil in 1:1 ratio). The remaining four groups were administered orally with Vitamin C (20 mg/kg), or PHYTOCEE® (20, 100, 200 mg/kg). Vehicle, Vitamin C and PHYTOCEE® were administered for 10 days to the respective groups and all animals except in vehicle control group were challenged with carbon tetrachloride (1:1 in olive oil). The animals were anesthetized 24 h after CCl₄ administration, blood was drawn and serum was separated for biochemical analysis. Animals were euthanized; liver was excised, blotted and processed for the biochemical assays.

RESULTS

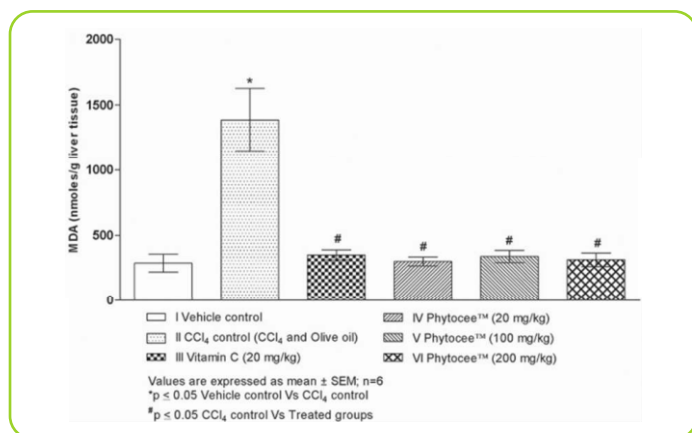


Figure 1. Effect of PHYTOCEE® on hepatic MDA

MDA, Malondialdehyde

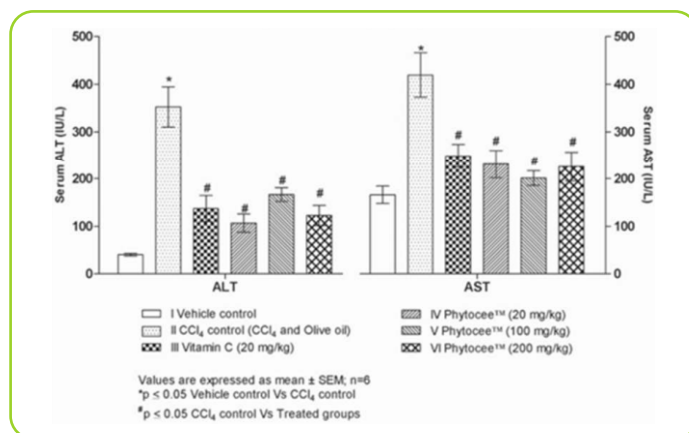


Figure 2. Effect of PHYTOCEE® on serum ALT and AST

ALT, Alanine aminotransferase; AST, Aspartate aminotransferase

CONCLUSIONS

PHYTOCEE® administration significantly reduced the hepatic MDA, and serum ALT and AST levels. Therefore, PHYTOCEE® can markedly reverse the effects of CCl₄ induced oxidative stress.

OUTCOME

Hence, PHYTOCEE® was confirmed to possess antioxidant properties.