EuroSciCon

April 18-19, 2019
Paris, France

World Congress on
Immuno Oncology &
Clinical Pharmacy

Arch Cancer Res 2019, Volume:7
DOI: 10.21767/2254-6081-C2-024

METABOLISM OF POLYGONUM BISTORTA AND IT'S ACTIVE PRINCIPLE AGAINST CARBON TETRA CHLORIDE-INDUCED TOXICITY IN LIVER AND KIDNEY

Deepak Kumar Mittal
Sri Satya Sai University of Technology and Medical Sciences, India

Background & Aims: The goal of the present work is to evaluate and compare the efficacy of root extract of Polygonum bistorta and tannic acid against acetaminophen induced damage in liver and kidney.

Methods: Male rats (150 g b.w.) were administered a single bolus dose of carbon tetra chloride (1.5 ml/kg, p. o acute and 0.15 ml/kg p.o. subchronic). Extract (PB) and its active principle (TA) was given at the dose of 100 mg/kg and 25 mg/kg, respectively (p.o.) after 24 hrs of toxicant administration. The hepatotoxicity produced by acute acetaminophen administration was found to be inhibited by Polygonum bistorta and tannic acid with evidence of decreased levels of serum transaminases, alkaline phosphatase, protein, albumin, bilirubin, urea, creatinine, triglycerides and cholesterol concentration whereas increase was found in blood sugar.

Results: A significant rise was observed in lipid peroxidation level however reduced glutathione content was decreased. A concomitant fall was observed in the enzymatic activities of adenosine triphosphatase, glucose-6-phosphatase and histopathological findings. Plant extract and its active principle prevent the development of acute liver damage, thus supported these biochemical and histopathological findings.

Conclusion: The results of this study clearly indicate that PB and TA have a potent hepatoprotective action; whereas tannic acid has shown protective effect compare to Polygonum bistorta against carbon tetra chloride -induced toxicity.

deepakmittal05@gmail.com