ABSTRACT

Aim: The present study was phytochemical investigation and evaluation of hepatoprotective activity of herbal formulation of *Caesalpinia bonduc* L., *Mangifera indica* L. & *Ricinus communis* L. against *CCl₄* induced liver damage model in rats. Materials and Methods: The extraction of leaves of *Caesalpinia bonduc* L., *Mangifera indica* L. & *Ricinus communis* L. using ethanol and further with maceration. Then phytochemical investigation and standardization are done. The herbal formulations (Tablet) which are prepared from leaves extracts of *Caesalpinia bonduc* L., *Mangifera indica* L. & *Ricinus communis* L. and formulation used treatment of induced hepatotoxicity and Standard drug used as Liv-52. The Preliminary phytochemical tests were done. Results: The ALE of *Caesalpinia bonduc* L. & *Mangifera indica* L. which shown the presence of alkaloids, flavonoids, carbohydrates, tannins and steroids. The AQE which shown the carbohydrates, flavonoids and alkaloids. The herbal formulations did not produce any mortality. The inducing agent produced the significant changes in biochemical parameters increases in serum glutamate pyruvate transaminase (SGPT), Serum glutamate oxaloacetate transaminase (SGOT), alanine phosphatase (ALP) and serum bilirubin. Pretreatment with ALF-I, ALF-II, AQF-I and AQF-II herbal formulations significantly prevented the biochemical and histological changes by induced by *CCl₄* in the liver. Conclusion: The present study that shows the herbal formulation of ALF-II and AQF-II extracts having hepatoprotective activity.

KEY WORDS: Hepatoprotective, Liv-52., Herbal Formulation, CCL₄.