

Protective effects of *Sida veronicaefolia* against ethanol induced hepatotoxicity in experimental animals

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Abstract

The present study is to evaluate the hepatoprotective effects of the ethanol (*EESV*) and aqueous (*AESV*) extracts of leaves of *Sida veronicaefolia*, against ethanol induced hepatotoxicity in rats. The hepatoprotective effects of *EESV* (500 mg/kg) and *AESV* (500 mg/kg) were estimated by liver function test and serum profile. The results revealed that both the extracts of selected plant produce significant hepatoprotective effect not only by decreasing serum transaminase (SGPT & SGOT), alkaline phosphate and total bilirubin, but also significantly increased the levels of total protein. The effects of *EESV* and *AESV* were comparable with standard drug silymarin.

Keywords: hepatotoxicity; *Sida veronicaefolia*; SGPT; SGOT

Introduction

The liver is an organ of paramount importance, which plays an essential role in the metabolism of foreign compounds entering the body. Human beings are exposed to these compounds through environmental exposure, consumption of contaminated food or during exposure to chemical substances in the occupational environment. In addition, human beings consume a lot of synthetic drugs during diseased conditions which are alien to body organs. All these compounds produce a variety of toxic manifestations (Athar et al., 1997). Conventional drugs used in the treatment of liver diseases are often inadequate. Therefore it is necessary to search an alternative drug for the treatment of liver diseases to replace the currently used drugs of doubtful efficacy and safety. India is well known for a plethora of medicinal plants. The medicinal use of many plants (as hepatoprotectants) like *Andrographis paniculata*, *Azadirachta indica*, *Cassia fistula*, *Elephantopus scaber*, *Hibiscus rosasinensis*, *Phyllanthus debilis*, *Picrorrhiza kurroa* has been reported in the literature (Rajesh et al., 2001; Anandan et al., 1999).