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Chemopreventive potential of *Platycladus orientalis* extract against liver oxidative injury in experimentally challenged rats

Alok Kumar Dash and Jhansee Mishra
Suresh Gyan Vihar University, India

The aim of this study was to characterize the *in vivo* action of *Platycladus orientalis* extracts in hepatic ischemia/reperfusion injury (IRI) and its effects on liver regeneration involving the investigation of mechanisms of action and effects on animal survival. Liver is a vital organ performing wide range of functions, oxidative damage is implicated in the pathogenesis of various liver disorders. Present study was aimed at evaluating protective ability of *Platycladus orientalis* Linn. against paracetamol induced hepatotoxicity in rats. The aqueous and petroleum ether extract of *Platycladus orientalis* were studied for their hepatoprotective and antioxidant effects on paracetamol (750 mg/kg) induced acute liver damage on Wistar albino rats. Different types of biochemical parameters such as (TST), liver weight & volume, alanine amino transferase (ALT), aspartate aminotransferase (AST) and alkaline phosphatase (ALP), bilirubin and total protein. Further, the effects of both extracts on serum thiobarbituric (TBAR), glutathione (GSH), superoxide dismutase (SOD) and catalase (CAT) were estimated to measure the degree of protection. In order to confirm its activity, various analytical techniques such as TLC, HPLC, HPTLC etc. were used. It is concluded that the Chinese plant *Platycladus orientalis* produce significant ($P < 0.05$) hepatoprotection by decreasing the activity of serum enzymes, while they significantly increased the levels of oxidative enzymes.

Biography

Alok kumar Dash is a research scholar from India and completed his Mpharm at the age of 25 years from Biju Pattanaik University of Technology, Odisha and PhD studies from Gyan vihar University. He has published more than 35 papers in reputed journals. He has attended more than 20 conferences to delivery his presentations. His major area of interest is Phytochemistry.

alokkudash@yahoo.co.in