

Acute Oral Toxicity of Methanolic Seed Extract of Cassia fistula in Mice

Type:

Article

Abstract:

Background and objective: Cassia fistula is widely used in traditional medicine to treat various types of ailments. The evaluation of toxic properties of C. fistula is crucial when considering public health protection because exposure to plant extracts can result in undesirable effects on consumers. Hence, in this study the acute oral toxicity of C. fistula seeds extract was investigated in mice. Results: Oral administration of crude extract at the highest dose of 5000 mg/kg resulted in no mortalities or evidence of adverse effects, implying that C. fistula is nontoxic. Throughout 14 days of the treatment no changes in behavioural pattern, clinical sign and body weight of mice in both control and treatment groups. Also there were no any significant elevations observed in the biochemical analysis of the blood serum. Further, histopathological examination revealed normal architecture and no significant adverse effects observed on the kidney, heart, liver, lung and spleen. Conclusions: Overall, the results suggest that, the oral administration of C. fistula methanolic seeds extract did not produce any significant toxic effect in mice. Hence, the extract can be utilized for pharmaceutical formulations.

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