Hepatoprotective study of delphinium zelil

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Traditionally in India,China and Japan herbal medicine are use for liver disease treatment.A common pathological mechanism that cause initiation and progression of hepatic damage is Oxidative stress. Traditionally *Delphinium zelil* was use for liver inflammation,diuretic and anodyne.Present study was to assess the phytochemical and hepatoprotective activity of ethanolic and n-hexane extracts of whole dried plant of *Delphinium zelil* against paracetamol intoxicated albino rats. The phytochemical investigation was carried on the both extracts of *Delphinium zelil*. Results revealed the presence of following active constituents such as alkaloids, tannins, phenols, glycosides, steroids and flavonoids in n-hexane extract and absence of tannins in ethanolic extract. Two hepatoprotective studies were performed using paracetamol intoxicated method. In study A animals were pretreated for 7 days with ethanolic and n- hexane extracts at doses of 200 mg/kg and 400 mg/kg daily by oral rout. On 8th day hepatoxicity was induced by administering a single oral dose of paracetamol (1g/kg).In study Bhepatoprotective activity of ethanolic extract at doses of 200 mg/kg and 400 mg/kg was assessed by concurrent administeration of sub-acute dose of paracetamol (500 mg/kg) daily dose by oral rout. Results showed that there was significant decrease in biochemical parameters (AST, ALT, ALP and bilirubin) values of *Delphinium zelil* ethanolic and n-hexane extracts 200 mg/kg and 400mg/kg dose treated rats when compared with paracetamol intoxicated rats serum biomarkers Histopathological findings on toxic models showed necrosis, fibrosis, inflammation with sinusoidal and portal vein congestion and central vein dilation.Both extracts of *Delphinium zelil* ethanolic and n-hexane 200 mg/kg and 400 mg/kg doses treated rats histopathological results revealed these altered parameters towards normal values,which were compared with silymarin.This study suuports the use of active phytochemical constitutents from *Delphinium zelil* ethanolic and n-hexane extracts against in liver diseases. Thes phtochemicals may be developed as drugs for the treatment of liver diseases.

Biography

Bushra sadaf is a Pharmacologist. Currently teaching Physiology and Pharmacology in Leads college of Pharmacy. She has experience as clinical and Hospital pharmacist in shaukat khanaum memorial cancer hospital and research centre and in Cardiac Hospital. Free radical is major cause of many major disease in human. In Pakistan out of 10 one is a hepatic patient. She follows ancient uses of herbs and then she adopts lab tests and phytochemical analysis reveal antioxidant activity of above stated plant extract. Histopathological and Biochemical parameters revealed Hepatoprotective activity of Delphinium zelil and soon dosage form available as futher research performed on it.

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