عنوان مقاله:

Capparis spinosa L. Reduces Cisplatin-induced Acute Liver Injury in Male Rats: Pretreatment and Single Dose Therapy

محل انتشار:

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نویسندگان:

Sonya Heydari - *Department of Persian Medicine, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran*

Seyed Hojjat Hosseini - *Department of Pharmacology, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran*

Koorosh Kamali - *Department of Public Health, School of Public Health, Zanjan University of Medical Sciences, Zanjan, Iran*

Saeed Sardari - *Department of Persian Medicine, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran*

Negin Parsamanesh - *Metabolic Diseases Research Center, Zanjan University of Medical Sciences, Zanjan, Iran*

Leila Ghassemifard - *Department of Persian Medicine, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran*

Narjes Khavasi - *Department of Persian Medicine, School of Medicine, Zanjan University of Medical Sciences, Zanjan, Iran*

خلاصه مقاله:

Cisplatin as a chemotherapeutic agent causes liver injury by increasing inflammatory production. Capparis spinosa L. as a source of natural antioxidants can clear this production. The present study was designed to assess the effects of pretreatment as well as treatment with a single dose of hydroalcoholic extract of Capparis seed on cisplatin-induced liver damage in rats. Forty-eight male Sprague-Dawley rats were divided into six groups (control group, Cis (cisplatin) group, ۲۰۰ C/S (C. spinosa), Cis + ۵۰ C/S ۱-day, Cis + ۱۰۰ C/S ۱-day, and ۱۰۰ C/S + Cis groups). Biochemical and histopathological assessment were done. Statistical analyses were performed with Graph Pad Prism Statistics software ۹.۱.۲. The level of significance was set at $p < ۰.۰۵$. Liver function tests, antioxidant and inflammatory parameters and quantitative parameters of histopathological changes were measured. Significant changes in the pathology results were obvious. The diameter of central vein, portal vein, and bile duct, the thickness of the hepatic artery wall, and hepatic sinusoids were significantly increased in the Cis and ۲۰۰ C/S-fed groups, compared to the controls, and also changes in favor of improvement were evident in the treatment groups compared to the Cis and ۲۰۰ C/S groups. By increasing the time interval between cisplatin injection and testing, as well as using the western blotting method to measure the level of antioxidant and inflammatory markers, we may have significant biochemical

and antioxidant results. Based on pathology results, single-dose treatment with C. spinosa seed extract may be beneficial in the cisplatin-induced liver damage.

کلمات کلیدی:
Drug-Induced Liver Injury, Capparis spinosa L, Cisplatin, Medicine, PERSIAN