



سرویس های
ویژه



سرویس ترجمه
تخصصی



کارگاه های
آموزشی



بلاگ
مرکز اطلاعات علمی



سامانه ویراستاری
STES



فیلم های
آموزشی

کارگاه های آموزشی مرکز اطلاعات علمی جهاد دانشگاهی



کارگاه آنلاین
بررسی مقابله ای متون (مقدماتی)



کارگاه آنلاین
پروپوزال نویسی و پایان نامه نویسی



کارگاه آنلاین آشنایی با پایگاه های اطلاعات علمی
بین المللی و
ترفند های جستجو



Assessment of hepatoprotective effect of traditional Iranian herbal medicine “*zereshk-e-saghir*” on carbon tetrachloride induced hepatic damage in rats.

Authors (Corresponded Author):

Zarrin sarhady nejad¹, Ali mandegary-bamakan¹, Fariba sharfififar¹, saeedeh mokhtari¹, Maryam iranpour²,
Affiliation:

Herbal and traditional medicines research center, faculty of pharmacy, Kerman university of medicinal science, Kerman, Iran.

Department of Pathology, Kerman University of Medical Sciences, Kerman, Iran.

Introduction: Use of herbal drugs in the treatment of liver disorders has a long tradition, especially in old manuscripts of Iranian hakims. One of them is “*zereshk-e-saghir*”(ZES). This study was designed to investigate the protective effects of ZES on an animal model of hepatotoxicity induced by carbon tetrachloride (CCl₄).

Method: The sixty-four albino Wistar rats were divided into 8 groups. Group I-IV was control groups that received normal saline (I and III) and vehicle (II and IV); Group V-VIII received respectively 250, 500, 750 and 1500 mg/kg ZES by gavage for 14 days. At day 15, groups III-VIII received CCl₄ 1 ml/kg 1:1 in olive oil intraperitoneally. Forty-eight hour after CCl₄ injection, rats were sacrificed and their liver and blood collected for determination of alanine aminotransferase, aspartate aminotransferase and alkaline phosphatase (ALT, AST, and ALP), histopathological examination and antioxidant status. Acute organ toxicity of the formulation was evaluated by measuring cell blood count, liver marker enzymes, creatinine, antioxidant status and histopathological examination in 4 groups of 8 rats.

Results: Treatment with ZES dose-dependently reduces the serum level of ALT, AST, and ALP. Histopathological examinations almost confirm that. Decrease in lipid peroxidation and maintaining the levels of glutathione and total antioxidant capacity occur with pretreatment of ZES. There was no significant hematotoxicity and hepatotoxicity with the treatments of rats till dose 1500 mg/kg of formulation.

Discussion: The present study revealed that long term usage of ZES is safe for organs. Meanwhile ZES can probably be used against liver injuries induced by xenobiotics. Further studies in other models of liver injury are recommended for finding the exact hepatoprotective mechanism of ZES.

Keywords: CCl₄-induced liver damage, Hepatoprotective, Oxidative stress, Traditional Iranian herbal medicine



سرویس های
ویژه



سرویس ترجمه
تخصصی



کارگاه های
آموزشی



بلاگ
مرکز اطلاعات علمی



سامانه ویراستاری
STES



فیلم های
آموزشی

کارگاه های آموزشی مرکز اطلاعات علمی جهاد دانشگاهی



کارگاه آنلاین
بررسی مقابله ای متون (مقدماتی)



کارگاه آنلاین
پروپوزال نویسی و پایان نامه نویسی



کارگاه آنلاین آشنایی با پایگاه های اطلاعات علمی
بین المللی و
ترفند های جستجو