

## عنوان مقاله:

Effect of crocin on cardiac antioxidants, and hemodynamic parameters after injuries induced by hepatic ischemia-reperfusion in rats

## محل انتشار:

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## خلاصه مقاله:

**Objective(s):** This research aimed to test the impact of liver ischemia/reperfusion (IR) insult on the activity of antioxidant enzymes, functional enzymes, histological, and hemodynamic parameters of heart, as well as protective function of crocin on these variables in rats. **Materials and Methods:** Thirty two rats were randomly assigned into 4 experimental groups (8 rats in each). I: sham-operated, II: IR induction, III: Crocin alone, and IV: Crocin+IR induction. Groups I and III received normal saline at 2 ml per day and crocin at 200 mg per kg on a daily basis for a week via intraperitoneally injection. Afterwards, laparotomy was performed. Groups II and IV was also received normal saline and crocin and then experienced a 45 min ischemia followed by 1 hr reperfusion. Tissue samples of heart and blood were taken to use for further microscopic and laboratories analysis. Hemodynamic parameters were measured by tail cuff method. **Results:** Findings indicated that crocin dramatically elevated the activity of antioxidant enzymes, and attenuated serum concentrations of hepatic and cardiac enzymes. Crocin also inhibited histopathological disarrangements, and modulated hemodynamic parameters beyond IR-induced hepatic insult. **Conclusion:** Current experiment indicated that crocin has potential cardioprotective action following hepatic I/R-induced damage. Therefore, it can be administered before elective hepatic surgeries

## کلمات کلیدی:

Crocin, Heart, Hemodynamic parameters, Ischemia/Reperfusion, Liver

## لینک ثابت مقاله در پایگاه سیویلیکا:

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