

عنوان مقاله:

Protective effects of hydro-alcoholic extract of *Zataria multiflora* on lipopolysaccharide-induced inflammation and oxidative stress in rat liver

محل انتشار:

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خلاصه مقاله:

Objective: Liver is an important player in regulation of body homeostasis. Study investigated the effects of hydro-alcohol extract of *Zataria multiflora* (ZM) on oxidative damage, level of IL-6 and enzymes of liver in lipopolysaccharide (LPS)-treated rats. **Materials and Methods:** The rats were distributed into 5 groups: 1) Control; 2) LPS; and 3-5) ZM-Extract (Ext) 50, ZM-Ext 100, and ZM-Ext 200. ZM-Ext groups received 50, 100 and 200 mg/kg of extract 30 min before LPS. Drugs were injected intraperitoneally. The entire period of this project was 14 days. In first three days, only extract was injected and then, ZM was injected along with LPS. **Results:** LPS increased the level of ALT (Alanine aminotransferase), AST (Aspartate aminotransferase), ALK-P (Alkaline Phosphatase), IL-6, malondialdehyde (MDA), and nitric oxide (NO) metabolites and lowered thiol, superoxide dismutase (SOD) and catalase (CAT) concentration. ZM extract not only reduced ALT, AST, ALK-P, IL-6, MDA, and NO metabolites concentrations but also increased thiol content, and SOD and CAT levels. **Conclusion:** Extract of ZM prevented LPS-induced hepatotoxicity. This protective effect was associated with reduction in inflammation and oxidative stress.

کلمات کلیدی:

Zataria multiflora, Oxidative stress, Inflammation, Lipopolysaccharide, Liver Enzyme

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