

Protective Effect of Propolis Ethanol Extract on Ethanol-Induced Renal Toxicity: An in Vivo Study.

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摘要

Abstract

Acute p.o. administration of absolute ethanol (10 ml/kg) to fasted mice would produce extensive renal failure. Pretreatment with p.o. administration of propolis ethanol extract (PEE) could prevent such renal failure effectively and dose dependently. This renal protective effect of PEE may be contributed, at least in part, to its antioxidative activity. The maximal antioxidative effect against absolute ethanol (AE)-induced renal failure could be observed 1 hour after PEE administration. In order to further investigate the renal protective mechanism of PEE, lipid peroxidation and superoxide scavenging activity were conducted in vivo. PEE exhibited dose-dependent antioxidative effects on lipid peroxidation in mice renal homogenate. Results indicated that mice with acute renal failure have higher malonic dialdehyde (MDA) levels compared with those in PEE administered mice. It was concluded that the renal protective mechanism of PEE could be contributed, at least in part, to its prominent superoxide scavenging effect; hence, it could protect, indirectly, the kidney from superoxide-induced renal damages.