

البحث الثامن (بحث رقم ٨ في قائمة الأبحاث محل تقييم اللجنة الموقرة)

Title	Anti-nephrotoxic and Antioxidant Efficiency of <i>Rosmarinus Officinalis</i> Extract Against Isoniazid®-Induced Nephropathy in Adult Male Albino Rats.
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Journal Information	Egypt. Acad. J. Biolog. Sci., 10(2): 45- 61 (2018).
ISSN	2090-0767
Impact factor	-(201 [^])

Abstract:

Tuberculosis accounted as a serious disease throughout the world, and nephrotoxicity is one of the most serious side effects of main antituberculosis drugs. The objective of this study was to explore the nephroprotective potential of rosemary aqueous extract against Isoniazid®- induced nephrotoxicity. Adult male Wistar albino rats (150-170g) were randomly divided into four groups: 1) normal rats, 2) rats administrated with rosemary extract (440mg/kg/day), 3) rats received Isoniazid® (50mg/kg/day), and 4) rats treated with Isoniazid® in combination with rosemary extract. After eight weeks, the results revealed that rosemary extract along with Isoniazid® minimized the Isoniazid®-induced renal deterioration; this was evidenced by the significant reduction in serum levels of urea, creatinine, uric acid, TNF- α , IL-1 β and Na⁺ as well as kidney MDA, nitric oxide and DNA fragmentation .This was matched with a marked enhancement in calcium and K⁺ serum levels. and so kidney GSH, and Na⁺/K⁺ ATPase activity. Moreover, the histopathological findings showed a potential protection as the extract succeeded in prevention of Isoniazid® induced tissue degenerations. In conclusion, rosemary extract could play a beneficial role for the prevention of Isoniazid®-nephrotoxicity via its anti-oxidative and anti-nitrosative voltage.