

Effect of *Arbutus Pavarii* (Shemari) Libyan Medical Plant on Ethylene Glycol Induced Urolithiasis in Male Albino Rats

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Abstract : The present investigation is carried out to evaluate the effect of aqueous extract of *Arbutus Pavarii* (Shemari) Libyan medical plant on ethylene glycol(EG) induce lithiasis in adult male albino rats. The lithiasis was induced to rats by oral administration of EG (0.75 w/v%) for 21 days(group 1). Aqueous extract of Shemari (200 mg/kg) was given orally from 1st day for preventive regimen (group 2) and from day 21st up to 42nd day for curative regimen (group 3). The results indicated that the EG elevated the urinary ionic of calcium, oxalates and inorganic phosphate. The Shemari significantly ($P < 0.01$) reduced the levels of these ions. The histopathological findings showed that EG caused marked pathological changes in renal cortex; necrosis of glomerular tufts; mildly thickened bowman's capsule and coagulative necrosis of large number of convoluted tubules. However, the histological changes in preventive regimen group 2 showed the same changes observed in group 1, but milder in severity and less in frequency. It conclude that Shemari do reduce the urinary ionic levels of calcium, oxalates and inorganic phosphate but failed to prevent complete deterioration effects of EG on kidney structures.

Keywords : EG, shamari, kidney stone, Libyan medical plant, glycol, oxalates

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