

Evaluation of Antiurolithiatic Potentials from Cucumis sativus Fruits

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Abstract : The evaluation of antiurolithiatic potentials from the extracts of Cucumis sativus fruits at different doses and cystone (standard formulation) at a dose of 750 mg/kg were measured for both preventive and curative regimen in wistar rats by adding 0.75% v/v ethylene glycol (EG) to drinking water for 28 days, except normal rats. After the completion of the experimental period, (28th day) urinary parameters like (urine volume, routine urine analysis, levels of calcium, phosphate, oxalate, magnesium, sodium) serum biomarkers like (creatinine, BUN, uric acid, ALP, ALT, AST) kidney homogenate analysis for (levels of calcium, oxalate and phosphate) were analysed. The treated groups shows increased in the urine output significantly compared to the normal. The extract shows significantly decreased in the urinary excretion of the calcium, phosphate, magnesium, sodium and oxalate. The both preventive and curative treatment of extracts showed decrease in the stone forming constituents in the kidneys of urolithiatic rats further the kidneys of all the groups were excised and sectioned for histopathological examination which further claims to posses antiurolithiatic activity.

Keywords : Cucumis sativus, urolithiasis, ethylene glycol, cystone

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