

EVALUATION OF ANTI UROLITHIATIC ACTIVITY OF *HEMIDESMUS INDICUS* ROOT AGAINST ETHYLENE GLYCOL INDUCED KIDNEY STONES IN WISTAR ALBINO RATS

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ABSTRACT

The roots of *Hemidesmus indicus* are highly valued for their medicinal properties. The objective of this study was to evaluate anti urolithiatic activity of *H. indicus* roots against ethylene glycol induced kidney stones. In this study, 25 Wistar rats were divided into five groups, namely, Group-1 (control), Group-2 (disease control, ethylene glycol -0.75%), Group-3 (standard, cystone-750 mg kg⁻¹) Group-4 (methanolic extract of *H. indicus* - 40mg kg⁻¹) and Group-5 (methanolic extract of *H. indicus* - 80 mg kg⁻¹). On the 28th day, estimation of body weight, serum creatinine, urine, calcium, pH and microscopical analysis were carried out. Treatment groups were found to improve the kidney functions by lowering creatinine, uric acid, calcium levels similar to cystone treated groups. Methanolic extract of *H. indicus* (80 mg kg⁻¹) could effectively normalize serum parameters, when compared to disease control, standard and methanolic extract of *H. indicus* (40mg kg⁻¹). It was effects on urolithiasis inducing factors, hence methanolic extract of *H. indicus* (MEHI) could be a potential source of traditional drugs for treatment of urolithiasis.