

Toxicological Study of *Umbilicus rupestris* L. Leaves: Hematological, Biochemical, and Histopathological Studies

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Abstract : *Umbilicus rupestris* (UR) is an herbal medicine traditionally applied against the ignitions of the skin. The present paper aimed to study the acute and subacute toxicity with orally administered methanolic leaves extract of *Umbilicus rupestris* L (URMeOH). In acute toxicity tests, four groups of rats (n = 6/group/female) were orally treated with doses of 500, 1000, 1500 and 2000 mg/kg, and general behaviour, adverse effects, and mortality were recorded for up to 14 days. In subacute toxicity study, rats received URMeOH by gavage at the doses of 100, 200 mg/kg/day (n = 6/group) for 28 days, and biochemical, hematological, and histopathological changes in tissues (liver, kidney) were determined. URMeOH did not produce any hazardous symptoms or death and in the acute toxicity test. Subacute treatment with URMeOH did not show any change in body weight, and hematological and biochemical profiles. In addition, no change was observed either in macroscopic or microscopic aspects of vital organs in rats. Our result showed that *Umbilicus rupestris* extract could be safe for human use.

Keywords : acute toxicity, biochemical parameters, hematological parameters, *Umbilicus rupestris*, subacute toxicity

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