



The effects of LD50 of *Walterinnesia aegyptia* crude venom on blood parameters of male rats

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Abstract:

The effects of an acute LD50 dose of *Walterinnesia aegyptia* crude venom was studied in male albino rats over a period of seven days. The following analyses were performed at timed intervals of 1 h, 3 h, 6 h, 12 h, 24 h, 72 h and 7 days: white blood cells (WBC), red blood cells (RBC), Platelets count, hemoglobin content (Hb), hematocrit (Hct) and blood indices [Mean Cell Volume (MCV), mean cell hemoglobin (MCH) and mean cell hemoglobin concentration (MCHC)]. Serum enzymatic activities include alanine transaminase (ALT), aspartate transaminase (AST), γ -glutamyl transferase (γ -GT) and alkaline phosphatase (ALP), with the following metabolites concentrations (glucose, total protein, triglycerides and creatinine). These parameters were found to fluctuate with time, with tendency to regain normal control level within the first 6 h. The 12 to 24 h seems to be crucial for the process of physiological recovery. The process of physiological adaptation and recovery from LD50 venom dose seems to stabilize after one week, leaving the animal alive with several lesions and disturbed physiological profile.

Keywords:

Blood parameters, crude venom, enzymes, LD50, metabolites, *Walterinnesia aegyptia*.

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