Abstract

Herbal extracts must be evaluated for their efficacy and safety. In vivo acute toxicity studies must consider the different mechanisms by which active compounds may elicit toxicological outcomes. Thus, a methodology to test general parameters related to acute toxicity responses in a murine model was developed, using a Saw Palmetto extract (HiPower®): adult male Sprague-Dawley rats were treated orally with two doses of HiPower® (the recommended dose for humans and a dose 10-fold higher) for 10 days, to examine general homeostatic parameters (hemogram and clinical chemistry) as well as morphological features of tissues involved in the response to xenobiotics (liver, kidney, spleen, and lymphatic ganglia). None of the parameters analyzed underwent significant changes during treatment, suggesting that HiPower® displays a good safety profile for the period tested. This method may be adopted for testing the in vivo acute toxicity of herbal extracts.

Keywords

Saw Palmetto, safety profile, Sprague-Dawley rats, acute toxicity.