

## Screening of Analgesic Activity and Adverse Effects of Bisthiazolidine in Male Albino Rats

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### Abstract

**Introduction:** This study was carried out to screen the analgesic efficacy and adverse effects of bisthiazolidines in male albino rats. **Materials & Methods:** The study was conducted using male Albino rats (130-175gm.) housed in polypropylene cages. The animals were divided into 5 groups (n=6) each receiving different treatments. Both central visceral and peripheral somatic pain were screened using radiant heat method, hot plate method and writhing test. The first group of animals was taken as control, the second group was given the reference standard drug and the other groups received bisthiazolidines at different doses. For sub-acute toxicity study, bisthiazolidines was given per orally (P.O) daily for 14 days at the dose level of 75 mg/kg. Biochemical analysis of blood and histopathological study of GI mucosa was done after 14 days. **Results:** Bisthiazolidines showed significant analgesia compared to control. The results were significant ( $p < 0.05$ ) in radiant heat method and also in hot plate method ( $p < 0.05$ ) at the dose of 75 mg/kg. Writhing test showed highly significant result with maximum inhibition (51.17%) at the dose of 75 mg/kg. No significant adverse effects on renal and hepatic functions were found with bisthiazolidine. Histopathological study of GI mucosa showed preservation of normal architecture with bisthiazolidine. **Conclusion:** Bisthiazolidine showed significant peripheral somatic analgesia and also proved to be safe in respect of the renal and hepatic functions along with no adverse effects on GI mucosa.