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Poster Presentation

The Effect of Hydro- Alcoholic Extract of Caralluma Tuberculata on Acute and Chronic Pain in Male Rat

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Abstract

Neuropathic pain, caused by a lesion or disease affecting the somatosensory nervous system, has a substantial effect on quality of patient life. Given that the synthetic drugs can produce serious side effects they are not suitable for long-term use, therefore it is assumed that herbal medicine can be effective as an alternative to Analgesic agent. The aim of this study was evaluation the analgesic effects of hydroalcholic extract of Caralluma tuberculata (Ct) in male rat. 42 Male Wistar rats, weighing 200±20 g, were divided into 7 groups (n=6); Groups included: control, sham-treatd Ct (75, 125, 250mg/kg), and positive control groups, respectively diclofenac (5mg/kg) and morphine (2.5mg/kg) and the group receiving (125mg/kg) extract + naloxone (1mg/kg). One hour later Pain was induced by applying 50 µL of 2.5% formalin in distilled water in the subplantar of the right hind paw. Our findings revealed that the Ct treatment can significantly decrease formalin-induced pain in rat. Ct (125, 250 mg/kg) significantly inhibit the aute phase ($P < 0.001$), whereas, the all concentration of Ct were affected on the chronic phase of formalin-induced pain ($P < 0.001$). Our data suggest that the systemic and peripheral antinociception activities of Ct probably were mediated through the opioid receptors in the periphery and also in the central nervous system.

Keywords: Acut and Cronic Pain, Formalin Test, Caralluma Tuberculata

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