

Analgesic and Anti-inflammatory activities of Camel Thorn in Experimental Animals

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Abstract : The aim of this study is to investigate analgesic and the anti-inflammatory effects Camel Thorn Extract (CTE) in rodents. Male albino mice weighing 20-25 gm. were divided into different groups each of 8 mice. The control was given normal saline i. p., the first group was given normal saline i. p. the 2nd, 3rd, 4th, groups received different doses of CTE (330, 660, and 1300 mg/kg) respectively and the 6th group received 5mg/kg of morphine i. p. All groups (except the control group) were given acetic acid 40 min after receiving the different treatment. The number of writhes was recorded 5 min after acetic acid injection for 15 min and the % of inhibition of writhing were calculated. Different groups of rats weighing 180- 220 gm., were divided into three groups each of 5 rats. At the beginning, the volumes of the right and left paw in animals were measured by using of the plethysmometer. The 1st group was given 660 mg /kg i. p. of CTE, the 2nd group received indomethacin (5 mg/kg i. p.). One hour later, edema was induced by sub planter injection of 0.1 ml of 1 % freshly prepared suspension of carrageenan into the right hind paws of the rats. The volume of the injected paws and contra-lateral paws were measured at 0, 0.5, 1, 2, 3, 4, and 5 hours using plethysmometer. The volume of the left paw of the rat was subtracted from the volume of the right paw of the same animal. Our results showed that 330, 660 and 1300 mg/kg produced 14, 49 and 84% of inhibition of writhes, indicating that CTE has a strong analgesic activity. Our data also showed that the % of inhibition of edema at 30, 60, 120, 180, and 240 min was 14, 51, 71, 61, and 56% in the animals given camel thorn extract whereas these figures in animals given endomethacin were 14, 24, 54, 52, and 54%. These results indicate that camel thorn has anti-inflammatory activities. The mechanism of analgesic and anti-inflammatory activities needs further investigations.

Keywords : camel thorn, indomethacin, morphine, pharmaceutical medicine

Conference Title : ICPPM 2014 : International Conference on Pharmacology and Pharmaceutical Medicine

Conference Location : Kuala Lumpur, Malaysia

Conference Dates : February 13-14, 2014