

A comparative evaluation of anti-nociceptive property of curcumin, *Centella asiatica* and their combination in diabetic neuropathic rats

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The study was done to discern the anti-nociceptive effect of *Curcuma longa* (CL), *Centella asiatica* (CA) and their combinations in diabetic neuropathic rat using hot plate method after single dose and eight day treatment. Diabetic neuropathy was induced in 4 weeks by single i.p. dose of streptozocin 75 mg/kg. After dividing 66 rats (6 non-diabetic) in 11 groups, hot plate method was performed and normal saline, CA (50, 100 & 200 mg/kg), CL (20, 40 & 80 mg/kg) and CA+ CL (50+20, 100+40 & 200+80 mg/kg) were orally administered for eight days. Again on 8th day, hot plate method was performed. In additional 36 rats (6 non-diabetics), effect of single dose of normal saline, CA 300 mg/kg, CL 200 mg/kg, CA 300 mg/kg+CL 200 mg/kg and tramadol 12.5 mg/kg was assessed on hot plate method. Both the herbal drugs, CA as well as CL after single dose and eight day treatment, possesses significant anti-nociceptive property except CA at the dose of 50 mg/kg. Higher dose of both drugs shows higher level of significant effect as compared to its lower doses. Combination of these drugs provides better reduction in pain than their individual effects. Moreover, CL seems to be more effective than CA if these are to be used alone. As compared to tramadol, both these herbal drugs showed comparable effects.

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