THE EFFECTS OF PHA1B, A SPIDER TOXIN, CALCIUM CHANNEL BLOCKER, IN A MOUSE FIBROMYALGIA MODEL

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ABSTRACT

This study investigated the effects of Phα1β, pregabalin and diclofenac using an animal model of fibromyalgia (FM). Repeated administration of reserpine (0.25 mg/kg sc) once daily for three consecutive days significantly decreased thermal hyperalgesia, mechanical allodynia, and dopamine and serotonin content in the brain on the 4th day. Phα1β and pregabalin treatment completely reverted the mechanical allodynia and thermal hyperalgesia induced by reserpine treatment on the 4th day, but diclofenac was ineffective. Reserpine treatment significantly increased the immobility time in the forced swim test, which is indicative of depression in the animals. Phα1β, but not pregabalin, reduced the immobility time (56%), suggesting that Phα1β may control persistent pathological pain in FM.